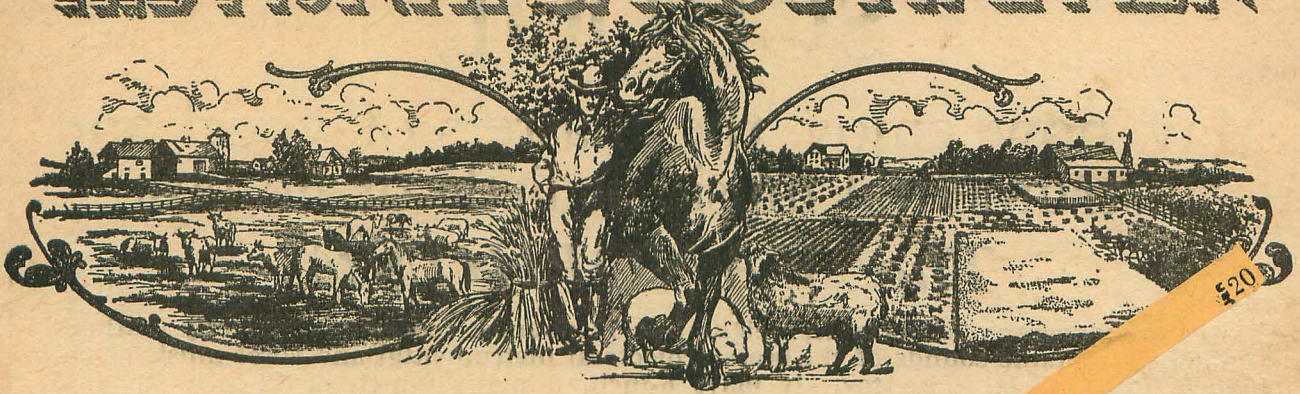


THE NORTH DAKOTA FARMER



"With Malice Toward None"

Alex Alin

Lisbon, N. D.

November 15, 1917

Vol. 19, No. 5

Our Diminishing Wool Clip



Our sheep have been diminishing steadily since the war began. We produced in 1916 only 35 per cent of the wool that we used. In providing uniforms for millions and millions of men the world is using more wool than ever before in its history. We have never seen such a price of wool as it exists today. There is practically famine in wool at the present moment. There is every reason in outlook and in profit for the increase of our sheep,—Herbert Hoover.

978.4
N814
Graham

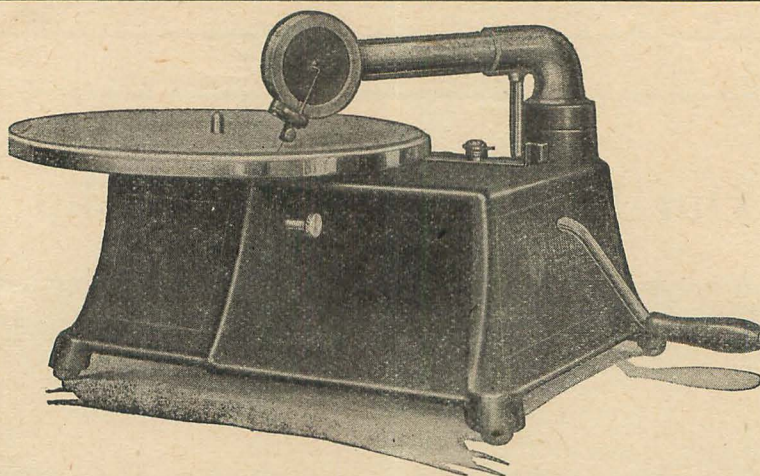
THE HOME AND THE SCHOOL

May now enjoy the masters of vocal and
instrumental music at little or no cost

The VANOPHONE

This phonograph is portable, weighs but 12 pounds, reproduces perfectly (without the hollow, metallic sounds of the brass projectors) instrumental and vocal music of the highest quality. It is no toy. It plays 6-inch, 8-inch, 10-inch or 12-inch standard records. It sells for \$12.

A
MUSIC
MASTER
FOR THE
MASSES



AT
PRACTI-
CALLY
NO
COST

The past summer I played this phonograph beside one costing several times as much and I was surprised to find that the tones were equally pure and distinct. So pleased was I that I determined to offer the Vanophone as a premium for subscribers to my two publications: The North Dakota Farmer and Rotary, and the Pathfinder, all of which should be in every North Dakota school and home.

Here is a letter from the first to take advantage of the above offer:

"I would like to ask you about getting another Vanophone. I want to get one myself and also to supplement the other one that we have in the school. The first one is a great deal better than I expected. Would you be willing to make us another offer like the one you made on the first one or what kind of a proposition will you make? I have an idea that we can get more subscriptions to the North Dakota Farmer and we will be willing to make up a cash sum too. How about it?"

MY OFFER

Simply send me the following subscriptions at the regular subscription price and the Vanophone is yours:

8 Subscriptions to the North Dakota Farmer at \$.75.....	\$ 6.00
10 Subscriptions to the Rotary at \$.50.....	5.00
1 Subscription to the Pathfinder.....	1.00
	\$12.00
Postage and Packing.....	1.00
	\$13.00

For only \$13.00 the Vanophone will be delivered to your door and the above magazines will be sent to one address or separate addresses for one year.

SPECIAL. Should you find that you cannot secure the above number of subscriptions, let me know the number you can secure and I will name a part-cash payment.

W. G. CROCKER, Publisher, Box F, LISBON, NORTH DAKOTA

THE NORTH DAKOTA FARMER

Vol. 19, No. 5

LISBON, N. D., NOVEMBER 15, 1917

75 Cents a Year

The Farmer, the Cornerstone of Civilization

By Theodore Roosevelt

(Copyright, 1917, by George H. Doran Company)

CO-OPERATIVE WORK SOLVES PROBLEM OF FARM CAPITAL.

Roosevelt Points Out Operations of Land Workers' Societies in Europe and Notable Experiment in U. S. as Proof.

(Editor's Note)—This is the second of a series of three articles by Col. Roosevelt on "The Farmer, the Cornerstone of Civilization.")

ARTICLE II.

As regards furnishing capital to the farmer, the first need is that we shall understand that this is essential, and is recognized to be essential in most civilized lands outside of Russia and the United States, but especially in Denmark, France and Germany.

Our farmers must have working capital. The present laws for providing farm loans do not meet the most important case of all, that of the tenant farmer, and do not adequately provide for the land-owning farmer. An immense amount of new capital—an amount to be reckoned in billions of dollars—is needed for the proper development of the farms of the United States in order that our farmers may pass from the position of under-production per acre, may improve and fertilize their lands, and so stock them as both to secure satisfactory returns upon the money invested and also enormously to increase the amount of food produced, while permanently enhancing the value of the land.

Lack of capital on the part of the farmer inevitably means soil exhaustion and therefore diminished production. The farmer who is to prosper must have capital; only the prosperous can really meet the needs of the consumer; and in this, as in every other kind of honest business, the only proper basis of success is benefit to both buyer and seller, producer and consumer.

To achieve certain of these objects it may be necessary to make use of

the government; but wherever possible it is better to use private, usually corporate or cooperative, effort. I believe that the day is coming when many kinds of successful business will admit, and insist on, an alloy of philanthropy. It often adds to, instead of diminishing, business success, to become within reasonable limits one's brother's keeper. (Is it necessary to say that in this, as in everything else, there is need of common sense?)

NORTH DAKOTA STATE SONG

Miss M. E. Plank, Valley City, N. D.

Prairie state of the blossoming rose,
Mother of men, brave to dare,
Mother of women, courageous and true,
May all thy future be fair.

Chorus

North Dakota, we will honor thee,
North Dakota, famed from sea to sea,
With thy boundless wind-swept plains
Rich with fields of ripening grains,
Fairest of all of earth's domains,
Praise to thee.

Free as thy winds be our liberty;
Our unity, splendid and strong,
Leading us on to that glorious day
When charity conquers all wrong.

Chorus

California Made Wise Start

The Jewish Agricultural and Industrial Aid Society has actually tried the experiment of a land bank to help men become farmers. In seventeen years, at an outlay of \$2,000,000, it has established 3,500 families on farms; and the losses have been small.

The manager of this society is now head of the Federal Land Bank in Springfield, Mass. He has proposed an agrarian land bank to do for the United States as a whole what it has

already taken part in successfully doing for some thousands of people. Such a land bank would aid tenants to become landowners, agricultural laborers to become small farmers, and landless immigrants with a farming past to go out on the land—where we need them.

California, under the wise administration of Hiram Johnson, pointed the path far advance in this as in so many other directions. She has begun the development of 5,000 acres, not by merely throwing the land open for settlement, but by building roads, schoolhouses, and even certain "improvements" on farms of suitable size; the effort has been to help the man who wishes to farm to go into the country and there find livable conditions.

Whenever farmers themselves have the intelligence and energy to work thru cooperative societies this is far better than having the state undertake the work. Community self-help is normally preferable to using the machinery of government for tasks to which it is unaccustomed. This applies to the ownership of granaries, slaughter houses and the like.

There are in Europe co-operative farmers' associations which own and run at a profit many such institutions; and when this is shown to be the case, the other owners of such agencies face the accomplished fact; and it often becomes possible for the farmers then to deal with them on a satisfactory basis.

European Farmers Blaze the Way

In Europe these great farmer co-operative associations sometimes control the whole machinery by which their products are marketed. Each little district has its own cooperative group. The groups of all the districts in the state are united again in a large cooperative unit. In this way they do collectively what is beyond the power of any one farmer individually to accomplish.

By sending their shipments to market they move them in great bulk quantities at the lowest possible cost. They contract for long periods ahead and sell in the most advantageous market. Middlemen are eliminated. The labor of moving farm products is reduced to a minimum.

But these enterprises are not state enterprises. The relationship of the state to them is confined to supervision, just as our bank examiners supervise the association of stock-

holders who come together to do a banking business; and certain general regulations that are in the interest of public policy are imposed upon them. A standard of equity and fair dealing is maintained by the forcing of the publication of accounts and by supplying disinterested examiners who see to it that equity is preserved by honesty and fairness among those associated in the enterprise.

Of course, the personal equation is all important; the best of schemes will work badly if we force it against the fundamental issues of fairness and honesty.

A single farmer today is no match for the corporations, railroads and business enterprises with which he must deal. Organized into cooperative associations, however, the farmers' power would be enormously increased.

farmers of Denmark, Holland (and parts of France, north Italy and Germany) have pointed the way.

In Denmark on a country road in the afternoon one can see a man wearing a cap of the cooperative association push a light wagon thru the village, gathering from each house a dozen or two dozen eggs and a roll of butter and cheese. As he takes it he stamps the eggs and records the quantity delivered in the record book of the member. At the end of his three or four-mile trip he meets a half-dozen other men at a small transfer station owned by the cooperative association.

There wagons or trucks load the products brought in and haul them to a nearby railroad station where the trucks from five or six transfer stations gather and fill a railroad car.

in carload lots to the cooperative associations in every village at a handling charge that is almost insignificantly small. This is the right way for farmers to organize.

Examples of what is done in foreign lands are of great use; yet we must always adapt them to our own needs, and not merely copy them; for no scheme of national betterment can succeed unless it takes into account national characteristics. Experiments in our own country therefore have a peculiar guidance value for us. For this reason those interested in the problem of farm life can well afford to pay some attention to what is at this moment being done in the Sandhill district of central North Carolina.

This is a district of sandy, and rather easily exhausted, soil. It was settled in the middle of the eighteenth



A Field of Corn at the Edgeley Sub-Station

The principle upon which such cooperative groups are formed is very simple. The profits are divided partly in the shape of a rebate that is paid in proportion to the volume of business done for each member. The control, however, of the association does not depend upon the number of shares that a member may own, but rests upon the democratic basis of one man one vote.

Cooperation Better than Socialism

In such associations they elect their own officers who are specifically qualified to deal with the agricultural problems of the association. These officers are subject to the direct control of those whose business and interests they handle. In this way politics is kept out of the farmer's business. Thru cooperative organization our farmers can build up their strength.

And normally they can do better in this way than by recourse to an extreme form of state socialism. The

The railroad car starts, and in its journey to the seaport meets several dozen additional cars loaded with the products of the association. At the seaport a shipload is waiting and the entire trainload of products is loaded and started for England. In England this ship is unloaded in the warehouse of an English cooperative association.

The products—butter, eggs, cheese, milk and other standard farm outputs—have been contracted for on a sliding scale on a yearly basis in advance. Between the peasant farmer of Denmark and the workingman consumer in London there is no middleman. Handling charges are reduced to the minimum. The gain goes to the producer in the shape of almost the full price, and to the consumer in the shape of reduced cost.

One American Experiment Notable

The cooperative farmers' association of Denmark buys saltpeter and nitrates in Chile by the shipload, and distributes them as they are unloaded

century, chiefly by Highland Scotch. It was then covered with valuable pine forest, and there was good, natural pasture. The people worked at lumbering and raised cattle.

Gradually the timber was cut off, and the wild pasture grazed out—in our usual wasteful fashion. A rather poor type of tillage was left—cotton and tobacco being the best crops. The people were of fine stock; but the schools were poor, the land was poor, the methods of farming were poor, the roads were bad, life was hard and flattened and joyless, and there was no idea of cooperation among the farmers—or indeed among the townsmen.

Then, a score of years ago, there began to be an uneasy consciousness that things were going backward rather than forward, and that some joint effort must be made or there would be complete dry rot. The effort was begun, with the usual preliminary struggles and failures. Enthusiastic reformers attempted to better matters

by wrong-headed action; and "hard-headed, practical men" sourly refused to take part in any action at all. But gradually leaders were developed. Gradually wisdom grew out of the soil of disheartening experience.

Board of Trade the Executive Head

The first concerted effort at joint action, made under the lead of half a dozen public-spirited citizens, was an attempted organization confined to the farmers—the cotton, fruit and tobacco growers. The objects were to solve the marketing problem, to devise a system of rural credit for the small farmer, and to spread better knowledge of agricultural methods.

This effort failed, one prime cause of the failure being the fact that the townspeople of the section, the merchants and business men who were in reality just as vitally interested in the agricultural prosperity of the section as the farmers themselves, were not asked to join. They had more ready money than the farmers, they were more accustomed to act together and were better acquainted with the outside world, and it was found that their help was essential.

So the organization was transformed into a board of trade, which was pledged to promote the development of the section as a whole and the interests of all classes of its citizens. It is composed of farmers, merchants, doctors—all the leading citizens. By its activities it has shown that it represents the organized Sandhill community, covering an area as large as Rhode Island and having a population of some 10,000 souls.

The Board of Trade works in practical fashion; which means that while it tries to educate the people to their real needs, it also commands their confidence by meeting the—usually less important—needs to which they are fully awake. Therefore it advertises fully—but honestly—the advantages of the Sandhills region for settlers and has been instrumental in getting a number to come in.

If it did only this it would be no more important than a thousand other local advertising committees. If it did not do this it would soon cease to appeal to the ordinary man, and would sink into the well-meaning impotence of so many "highbrow" associations for a species of uplift which the average man does not regard as practical. This board is a practical organization with intelligently high purposes. No organization can last long enough even to make a beginning in doing practical good to the people unless it is practical; and unless it actually functions instead of confining itself to

manifestoes and advice. Great is the persuasive power of concrete action!

The people of the district are working out the two problems of schools and health work. These two problems are, of course, themselves merely portions of the greater problem of securing in our struggling, individualistic country democracy the proper regulation by coherent community cooperation and self-control. In other words, our affair is to get our democracy to discipline itself; a difficult task, but essential to perform if we are to become a really great nation.

The Derby Memorial School in the Sandhills, represents the consolidation of three small, struggling backwoods schools. There are now over 150 pupils in the school; those that live more than two and one-half miles away are transported in cheap motors

at a cost of eight cents per child per day. The school is an excellent school—not markedly different from other first-class country schools in different country regions.

There is a school paper, edited by the pupils; the girls set the type and the boys do the printing. There is a library of 1,200 volumes, used as much by the older people of the community as by the children—and it speaks well for the taste of the community that "Treasure Island" is on the whole the most popular book.

Not much has been done in the way of vocational training, for the community is conservative and is wedded to old-fashioned book learning; but the school is being used more and more as a community center, and shows what important assets schools can become in neighborhood betterment.

Thoughts Concerning a National Policy for Grain and Livestock in Time of War

By Herbert Hoover, U. S. Food Administrator

The Grain Situation

The United States Food Administration is necessarily most deeply concerned in the problem of production. Our great Department of Agriculture has primarily the duty of education in production, but it falls upon the Food Administration to keep in constant touch with the food demands of our own people and the needs of the allies and other nations, and to arrive at broad conclusions as to what is required from the American producer in order to serve these combined interests during the war. It is this aspect of food supplies that I wish to treat in asking your cooperation in an effort to increase the livestock of this country.

A World Viewpoint of Food Production

In considering the production of food from the world point of view, we can obtain clarity of vision if we divide our foodstuffs roughly into bread grains, meats and fats, and fodder grains. This classification is based less upon chemistry and agriculture than upon the commerce of food.

There are two aspects from which we can consider this problem: The first is the aspect of our immediate necessities as a war measure, and the second, the broader aspect of the world need after peace; for conditions growing out of the war disturbance to production will have the most ma-

terial effect on the whole agriculture of the world for many years subsequent to peace.

But in order to arrive at some proper conclusions as to our immediate problem, we need to review the present situation as to world food supplies and the necessary reactions we must obtain to remedy the weakness in this situation.

The first commodity for consideration must be wheat—the predominant bread grain. Our rye takes a very minor part in bread making, for our total export possibilities are only 20,000,000 bushels. From a European breadstuff point of view, the other cereals are substitutes to be used in mixing with wheat, and a certain amount of wheat is essential.

Tables I and II give an illuminating view of the world situation.

Enlarged Shipping Facilities Could Relieve Wheat Shortage

There is, therefore, ample promise of a supply without effort on our part if shipping were available to transport it. But the world's shipping is already too short to afford sufficient tonnage to traverse the longer routes, and the bulk of the load thus falls upon North America. The journey to Australia and India requires three times the time of the one to North America and thus three times as many ships to transport the same quantity. Furthermore, the American route is best protected,

Table I.—Wheat situation in France, Italy, the United Kingdom and Belgium

	Bushels	Bushels.
Three-year prewar average imports from United States.....	79,426,000	
Three-year prewar average imports from Canada.....	112,900,000	
Three-year prewar average imports from elsewhere.....	188,478,000	
Total.....		380,804,000
Average production.....	590,675,000	
Estimated production for 1917.....	393,770,000	
1917 deficiency.....		196,905,000
Total imports required to maintain normal consumption.....		577,709,000

Table II.—Estimated export surplus of wheat in various countries from 1917 planting.

	Bushels	Bushels.
United States.....	80,000,000	
Canada.....	150,000,000	
Total North American surplus.....		230,000,000
Australia:		
Present surplus.....	120,000,000	
New-crop surplus.....	120,000,000	
India:		
Present surplus.....	50,000,000	
New-crop surplus.....	70,000,000	
Argentina: Estimated surplus from January harvest.....	180,000,000	
Total, other supplies.....		540,000,000
Grand total.....		770,000,000

The problem is thus simply one of ships. If ample shipping existed, there would be no need for saving or increased production of wheat on the part of the American people. But, on the other hand, if we can produce such economies in consumption and such stimulation of production in the United States and Canada as will enable us to feed the allies absolutely from this continent, and thus enable them in the final analysis to live without sending a ship farther afield than our Atlantic seaboard, we can resist the submarine indefinitely.

What Diminished Shipping May Mean

The world's shipping is much diminished and continues to diminish every day. In a year's time our building program may overcome the destruction; but in the meantime, month by month, ships must be diverted from longer to shorter routes to fill the gaps made by submarines. While it is highly desirable to maintain certain passenger and other mercantile service from Europe and the United States to Australia, India, and the Argentine, if it comes to the final issue of desperation, the remainder of these services that now exist can be cut off and the ships applied to trans-Atlantic traffic.

The Great Why of Conversation

The Canadian and United States supplies, upon a normal export basis, fall approximately 350,000,000 bushels short of the allied needs. If by conservation measures in Canada and our own country we can increase the export by 150,000,000 bushels we will

have reduced the deficiency to 200,000,000 bushels. This we could do if our people would eat one pound less of wheat flour per week and one pound of corn meal instead.

The remaining deficiency must be overcome either by greater reduction in consumption in the allied countries or by the substitution of other cereals for bread purposes, which can and will be done so far as is physically possible.

Beyond this there will be some transport from the more remote markets, for despite the shortage of shipping some steamship service is at present maintained to Australia, India, and the Argentine; and therefore the return of a certain amount of bread grains is possible so long as these services are maintained.

How to Win the War

The question of who wins this war is the question of who can endure the longest, and the problem of endurance, in a large degree, is a problem of food supply and the ships to carry it. If, therefore, we can arrange our economies in consumption and our increase in production so as to provide a full supply to the allies, and thus to get the best use of the shipping, we can contribute to the defeat of the submarine as surely as do our Navy and our shipbuilders. The farmer of the United States who works overtime and the consumer who economizes in his consumption are fighting the submarine with a positive and sure weapon.

Use of Transports After the War

There is, however, another phase to this accumulation of wheat in isolated

markets. If peace should come, a large number of ships in military transport will be released, and this wheat, of course, will be available to Europe and will come into immediate competition with the American wheat. As you will see from the tables, it represents more than the necessary supply for the allies and is, with Russian wheat, an ample supply for all Europe, Germany and Austria included.

Crop Insurance for 1918 Wheat Growers

For this reason it was felt that if we were to ask the American farmer to expand largely his acreage in wheat, he should have some assurance that he would not do so at his own loss, if peace intervened. Congress therefore, gave a guarantee of \$2 per bushel at primary terminal markets as to the 1918 harvest. This guarantee does not apply to the 1917 harvest; and, while the United States Food Administration has developed a method by which, so long as the Food Administration lasts, the farmer may receive an assurance of \$2.20 on the basis of the Chicago terminal market for his 1917 wheat, I would like to have it clear to every farmer in the United States that the Food Administration by law comes to an end with peace. So if peace should come between now and the 1918 harvest there will be a period in which no guarantees exist, and in which the price of wheat may fall much below present prices, due to competition from the more distant countries.

Even if carried over, 1917 wheat will not fall within the 1918 guarantee, and it therefore must be of prime interest to the American farmer to get his 1917 wheat into the market at the earliest moment. This statement is made not that I anticipate early peace, but to issue a warning that by failure to get his wheat to market the farmer would be absolutely gambling on the continuation of the war, with nothing to gain by withholding his 1917 wheat and all to lose should peace arrive.

With Peace Foreign Wheat Markets Vanish

With the stimulation of \$2 wheat, we are going to have a very much increased acreage in 1918. If climatic conditions are right, we should have 1,000,000,000 bushels. If the war continues, this wheat will be vitally necessary; but if the war should come to an end, there will be no foreign market for at least 400,000,000 bushels of this wheat. The Government must then take over the wheat and probably find a market for it at a very great loss.

I should anticipate that the Government may lose from \$300,000,000 to \$500,000,000 on this wheat guaranty if peace arrives before the 1918 harvest is marketed.

And, now, I would like to say frankly that I have felt from the beginning that the stimulation of the production of wheat for 1918 could have been obtained in perfect justice to the farmer if the guaranty had been given simply on the basis of a return on capital and labor, so that the price would depend upon the character of the harvest.

This does not mean that the farmer would not receive more than the minimum in case war continued; but, in case of a good harvest and peace intervened, the Government would have been saved several hundreds of millions of dollars if the guaranty had been placed on this footing, and justice would still have been done to the farmer. However, the guaranty has been fixed. It is an insurance against the submarine and any estimate of what it may cost we must leave to the future.

We may summarize the bread-grain position by saying that for the 1917 harvest we must economize in consumption, and for 1918 we have an assurance as far as law can give it of large production. Every indication of the planting of winter wheat points to a large increase next year.

DAKOTA LAND

Flossie Olsen and Rosalie Krauser

Out in the peaceful country

Where nature is smiling sweet,

Away from the noise and hurry

Of a dusty city street,

Living in the sunshine

Breathing the pure fresh air

Viewing the starry heavens

Loving it all so fair.

Out on a beautiful homestead

There is work for you to do,

But you say you must join your colors

The red, the white and the blue.

Could we be more patriotic

To our country and our God

Than to reap from the soil, by honest toil,

The gain of the yielding sod?

Out in dear old Dakota

The sun that shines above

Is the red that stands for bravery

In Old Glory, the flag we love;

The clouds that float above us

Are the white that for purity stand

The sky of blue, just means be true

To this dear old western land,

READY My 1918 BOOK

Send for It—Buy Direct—Save Money

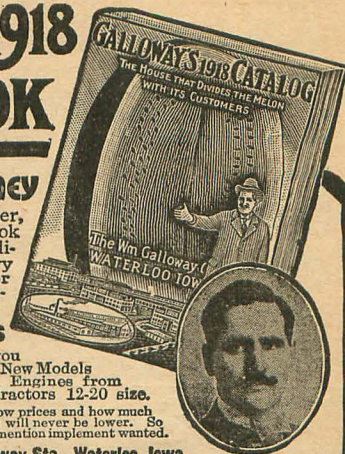
Stop where you are if you are about to buy a Spreader, Engine, Separator, Tractor. Send for my new 1918 Book and get my proposition. Let me explain how buying direct—getting your implement straight from the factory to your farm—saves you from 25 to 40%. I am the actual maker and sell you at lowest manufacturers' price based on piggy-bank volume. I cut out all waste between you and my factory.

Spreaders, Separators, Engines, Tractors

and the many other implements I sell in this way, and let you keep the saving at home and in your own pocket. My 1918 New Models are ready. Spreaders with 11 exclusive improvements; Engines from 13 to 16 H. P.; Separators in four splendid sizes; Tractors 12-20 size.

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Auctioneers Make Big Money

How would you like to be one of them? You attend the sales anyway, hence you are out the time and had just as well be making \$10 to \$100 per day. You may say you haven't the grit to try it. Very true, you did not have the grit to attempt to speak a piece when first starting to district school, but after learning your lesson well, it was easy.

We Teach You What to Say and How to Say It.

Four weeks' term opens Monday, December 31, 1917. Tuition \$75 for life time scholarship. This will doubtless be the last term at that price. Shall we make reservations for you?

W. B. CARPENTER, President, MISSOURI AUCTION SCHOOL,
Office R. 300-301, 818 Walnut Street, Kansas City, Mo.

**160 ACRE
FARMS IN
WESTERN
CANADA
FREE**



Canadian Farmers Profit From Wheat

The war's devastation of European crops has caused an unusual demand for grain from the American Continent. The people of the world must be fed and wheat at over \$2 per bu. offers great profits to the farmer. Canada's invitation is therefore especially attractive. She wants settlers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops

You Can get a Homestead of 160 acres FREE

and other lands at remarkably low prices. During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to acre. Wonderful crops also of Oats, Barley and Flax.

Mixed Farming as profitable an industry as grain raising. The excellent grasses full of nutrition are the only food required for beef or dairy purposes. Good schools, churches, markets convenient, climate excellent.

There is now an extra demand for farm laborers to replace the many young men who have volunteered for service in war. The government is urging farmers to put extra acreage into grain. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or

W. E. BLACK, Clifford Block, Grand Forks, N. D.
Canadian Gov't Agt.

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ENTRY CARD OF NORTH DAKOTA IMPROVED SEED GROWERS CONTEST

Date.....

Under the rules of the annual contest, please enter my samples as listed below. (The applicant should number all his samples to correspond to his numbers on this card.)

Kind and Variety of Grain for Seed	Amount Held for Sale as Seed	Amount Sold for Seed Purposes*
1.		
2.		
3.		
4.		

Name..... P. O..... Ry. Sta.....

*If any seed has been sold, list the names and address of the buyers.

ANNUAL SEED CONTEST

The North Dakota Improved Seed Growers' Association Annual Seed

Contest will be held at Fargo, Jan. 15-18. Full details regarding prizes and contest rules, etc., will be mailed to all applicants.

Remember—a one-pound sample of each kind of seed is the amount required for the contest. Make entry and send samples as soon as possible; the samples will be tested in the Seed Laboratory and if found of suitable quality they will be placed on seed lists which go to all parties who wish to buy seed for sowing. Later, the samples will be placed on exhibit at the Grain Growers' Convention, after being judged in the usual way at the Seed Laboratory.

Address correspondence and samples to H. L. Bolley, Agricultural College, N. D.

Only those who are paid up members of the Association will be in the contest for prizes and competitive scoring ribbons. \$1 pays for membership and entry fee for all samples a member may wish to show. The association has issued the above blank entry card which can be had on application, or may be used by clipping from this notice:

SEED WHEAT WANTED

We are in the market for a few cars of choice

SEED WHEAT ALSO MILLET SEED

Timothy, Clover and Bromus

In either car lots or small shipments. Mail samples for our bid.

Fargo Seed House, Fargo, N. Dak.

When writing the advertisers kindly mention the N. D. F.

Reboring and Grinding of Cylinders

This is the time to fit up your steam engines and gas tractors for the coming season

We can rebores and grind your cylinders, fit new oversize pistons and rings, make and fit new crank pins, straighten shafts, bore and bush gears and clutches or do any kind of machine work. Refue boilers and replace stay bolts. We carry in stock all sizes of stay bolts, patch bolts, bracket bolts, rivets, boiler flues, stay-bolt taps and boiler taps, shafting, shaft hangers, cast iron pulleys, wood split pulleys. Write and let us quote prices on any work you have.

Craig Brothers, Fargo, N. D.

P. O. Box 295.

Telephone 554 W.

GOVERNMENT CROP REPORT

Washington, D. C., Nov. 8, 1917.—
 A summary of preliminary estimates of crop production for the State of North Dakota and for the United States, as compiled by the Bureau of Crop Estimates (and transmitted thru the Weather Bureau), U. S. Department of Agriculture, is as follows:

Corn

State: Production this year, 5,270,000 bushels; last year (Dec. estimate), 13,515,000 bushels.

United States: This year, 3,190,000,000 bushels; last year (Dec. estimate), 2,582,241,000 bushels.

Wheat

State: This year, 58,630,000 bushels; last year (Dec. estimate), 39,325,000 bushels.

United States: This year, 659,797,000 bushels; last year (Dec. estimate), 639,886,000 bushels.

Oats

State: This year, 38,625,000 bushels; last year (Dec. estimate), 53,750,000 bushels.

United States: This year, 1,580,714,000 bushels; last year (Dec. estimate), 1,251,992,000 bushels.

Barley

State: This year, 23,543,000 bushels; last year (Dec. estimate), 26,738,000 bushels.

United States: This year, 201,659,000 bushels; last year (Dec. estimate), 180,927,000 bushels.

Rye

State: This year, 9,310,000 bushels; last year (Dec. estimate), 4,655,000 bushels.

United States: This year, 56,044,000 bushels; last year (Dec. estimate), 47,383,000 bushels.

Flaxseed

State: This year, 3,860,000 bushels; last year (Dec. estimate), 8,137,000 bushels.

United States: This year, 9,600,000 bushels; last year (Dec. estimate), 15,459,000 bushels.

Potatoes

State: This year, 4,050,000 bushels; last year (Dec. estimate), 6,975,000 bushels.

United States: This year, 440,000,000 bushels; last year (Dec. estimate), 285,437,000 bushels.

All Hay

State: This year, 1,875,000 tons; last year (Dec. estimate), 3,554,000 tons.

United States: This year, 91,715,000 last year (Dec. estimate), 109,786,000 tons.

Prices

The first price given below is the average on Nov. 1 this year, and the second the average on Nov. 1 last year.

State: Wheat, 201 and 155 cents per bushel. Corn, 160 and 86. Oats, 55 and 41. Potatoes 122 and 102. Hay \$11.10 and \$5.80 per ton. Eggs, 35 and 28 cents per dozen.

United States: Wheat, 200.0 and 158.4 cents per bushel. Corn, 146.0 and 85.0 cents. Oats, 61.7 and 49.0 cents. Potatoes, 128.0 and 135.7

cents. Hay, \$15.20 and \$9.99 per ton. Cotton, 27.3 and 18.0 cents per pound. Eggs, 39.4 and 32.2 cents per dozen.

BUILD A WHOLE COMMUNITY

The concentration of facilities for transportation, communication, and education, has built cities and towns at the expense of agricultural development.

The diffusion of these facilities among all of those who live on the land and farm it will build the whole community, and there will then be agricultural development to keep pace with the growth of commerce.

Rural telephones, parcel post, better roads, and motor vehicles make it possible for a man to stay on his farm and do business. He has almost the same facilities for carrying on his business as are enjoyed by those who live in town.

But the business farmer cannot continue living in the average country community.

He must "move to town to send the children to school" just about the time he gets properly organized for business on his farm. And he moves by the thousands every year, to the great loss of the country communities and of the towns as well.

There is the real problem of community building which every banker should study. Increased production, more profits from farming, will not solve it. The prosperous farmers are those who are lured from the land—not by the city's bright lights, but by the city's well organized schools.

TRAPPERS!

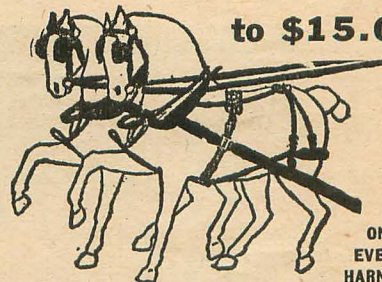


We buy for cash and pay highest market prices for Muskrat, Skunk, Mink, Coon, Opossum and all other fur-bearing animals, also for hides and Ginseng. We pay express and charge no commission. Write today for free price list and shipping tags.

HENRY STREIFF FUR COMPANY
Dept. 10, 318-322 W. Racine St., Monroe, Wisc.

YOU SAVE from \$7.00

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HARNESS

Send for our Catalog from Maker to Consumer

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READ THIS

There must be a reason why there is such a demand for Justin's Boots. If you are going to wear boots, why not wear the best? Yours for the Best Cowboy Boots Made. Send us your address on a postal card and we will send you our catalogue, and self-measuring system.

GIVE US A TRIAL

H. J. JUSTIN & SONS
Mfrs. of Justin's Celebrated Cowboy Boots. NOCONA, TEXAS

CANCER



and Tumors successfully treated (removed) without knife or pain. All work guaranteed. Come, or write for free Sanatorium book Dr. WILLIAMS SANATORIUM 3023 University Av., Minneapolis, Minn.

We Pay Top Prices Always

For Cream, Eggs and Poultry

We Are Cash Buyers. No Commission Charged.

Our motto: "Correct Weight and Honest Treatment." Prompt return of Check and empties guaranteed. Prices and Tags sent FREE.

A Trial Will Convince You that it pays to ship direct to us. Our outlet unlimited.

FARMERS CREAMERY & PRODUCE CO.,
Minneapolis, Minnesota.



BORING AND REAMING OF CYLINDERS

We rebores and ream all sizes of auto and gas engine cylinders fitting same with larger pistons and rings. We weld all Metals. Our machine shop is equipped to handle both large and small work. Send your next job to.

DAKOTA WELDING AND MANUFACTURING COMPANY

203-5th St. N. : : : FARGO, NORTH DAKOTA : : : Telephone 926

Driver Agents Wanted

Drive and demonstrate the Bush Car. Pay for it out of your commissions on sales. My agents are making money. Shipments are prompt. Bush Cars guaranteed or money back, 1918 models ready. Write at once for my 48-page catalog and all particulars. Address J. H. Bush, Pres. Dept. 11 D. C. BUSH MOTOR COMPANY, Bush Temple, Chicago, Illinois

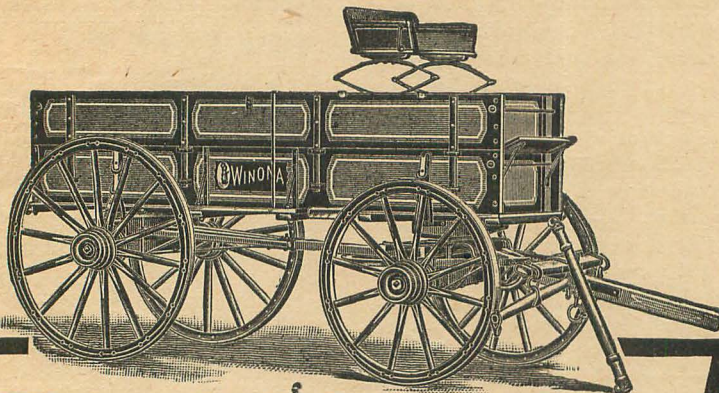


The foundation of our government is the average intelligence of all of its citizens. As a measure of self-protection, if nothing higher, the state should spend at least as much money to advance the opportunities for elementary education of all children as it does to provide facilities for higher

education of a very few.

If you would build the whole community, begin with the country schools. Develop them until there is no reason whatever for moving to town to send the children to school. Help establish in the country schools such as you would willingly use for the elementary and high school education of your own children. You will quickly find that many other problems, such as diminishing production and increasing tenantry, will cease to exist.

Build the whole of your community by making all of the conditions of life as desirable on farms as on town or city lots. Less than this will not work for permanent agricultural and community betterment.—Oklahoma Farm Journal.

**The Wagon that's Built for Service**

WINONA Wagons are built to make good in hard, steady road and field use. Extra strong where extra strength is needed. Made from "bone dry", time seasoned oak and hickory, ironed "for keeps."

WINONA FARM WAGONS

OUTER bearing axles prevent breakdowns. Clipped gears, strongest wheels in the world. Bent, double-riveted Felloes. Strongest Skeins, Poles and Hounds. Substantial extra cleated Boxes. Durable painting.

Write for Catalog showing different styles of Winona Wagons with details of their unequalled construction.

WINONA WAGON COMPANY, Winona, Minn.

ENCOURAGE AND MAKE USE OF THE SPIRIT OF PLAY

Playground Games, 10 cts. Rules for playing the more common games of the school ground. Game of Times, 15 cts. A help in teaching and learning the tables and simple factoring. Davies Number Cards, 25 cts. All possible combinations. For all grades. In boxes. Westland Phonic Cards, 25 cts. Busy work for primary grades. An aid to sight reading. Fundamentals in Arithmetic Teaching, 25 cts. Invaluable for rapid work in numbers. Uncle Will's Magazine, The Rotary, 50 cts. Unique. Has personal element. 21st year. North Dakota Speller, 50th M. For 5th-6th, and 7th-8th Grades, 15 cts each. Trial, both 25 cts. The Rotary, Box F, - - - - - Lisbon, North Dakota

Experiment Station**SUGAR CURING HAMS AND BACON**

When the meat has been cooled and cut up rub each piece with salt and allow it to drain over night. Then pack in a barrel with the hams and shoulders in the bottom, using the strips of bacon to fill in between or to put on top. For each 100 pounds of meat weigh out 8 pounds of salt, 2 of brown sugar, and 2 ounces of saltpeter and dissolve in 4 gallons of water. Pour on enough of this brine to cover the meat. In the summer it is best to boil the brine. If this is done, cool it before putting on the meat. The strips of bacon should be left in 4 to 6 weeks and the hams 6 to 8 weeks. They are then ready for smoking.

MANURE VALUABLE

Manure increases crop yields. The less the rainfall the more important the application of manure becomes. The higher priced the crops are, the greater the returns of the manure. The manure adds plant food and organic matter to the soil which is of more importance than it at first sight seems as the plant can get along with less moisture when the soil is well supplied with available plant food such as manure furnishes as it decays.

WINTER FEED FOR THE CHICK-ENS

A mixture of 3 parts bran, 2 of corn meal, 2 of wheat middlings, 2 of beef meal and 1 of alfalfa by measure, mixed dry, can be fed in a hopper

JUST PUBLISHED

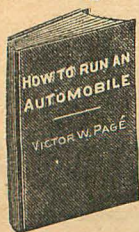
How To Run An Automobile

By Victor W. Page, M. S. A. E.

Price \$1.00

178 Pages

72 specially made Engravings



This treatise gives concise instructions for starting and running all makes of gasoline automobiles, how to care for them, and gives distinctive features of control. Shows the control groups of all popular makes of automobiles and describes every step for shifting gears, controlling engine, etc.

It is impossible to get the greatest efficiency out of a car until you know every point in running, caring for and adjusting the machine. In this new book just the problems you are up against are solved in a way that you can easily understand, and so that you can immediately turn to your car and apply the knowledge.

A book every one has been looking for. Fills a real need among motorists, dealers, chauffeurs, repairmen and all who must handle different makes of cars.

ADDRESS: NORTH DAKOTA FARMER, : : LISBON, N. D.

and kept before the birds at all times. Equal parts of oats, wheat and cracked corn should be fed in the litter. In cold weather feed the corn in the evening. In addition to this the birds should have some green food as mangels, carrots or cabbage. Grit, oyster shells and charcoal should be kept before the birds all the time.

PICKLED PIG'S FEET

Soak the pig's feet for 12 hours in cold water. Scrape them clean and remove the toes. Boil until soft, 4 to 5 hours will usually be required. Salt them when partially done. Pack them in a stone jar and cover them with hot spiced vinegar. They are served cold or split and fried in a batter made of eggs, flour, milk and butter.

VESSELS FOR CURING MEAT

A clean hardwood barrel is a suitable vessel in which to cure meat. A barrel made for the purpose is best, but where it cannot be had a molasses or syrup barrel will answer. A kerosene barrel that has been burned out and used for a water barrel for some time is often used for a meat barrel. The point is to have it clean and tight enough to prevent leakage. A barrel may be used again and again unless meat has spoiled in it. It should be scalded out thoroly each time before the meat is packed in it. A large stone jar is the best vessel that can be had. One holding 25 or 30 gallons is expensive and must be handled carefully to prevent breakage.

HOME MADE SOAP

Put the waste bits of fat or fatty material into a kettle. To purify add a raw potato sliced thinly, boil very slowly till the potato slices are crisp and brown, then strain thru several thicknesses of cheese cloth. Dissolve one pound of lye in 11 cups of water and pour it gradually into 7 pounds of the clarified and strained fat, stirring the mass till it is creamy and thoroly mixed. Pour into molds to harden. This will make a satisfactory soap for dishwashing, laundry and similar purposes.

BIG CATTLE SALES

In the first 8 months of this year 2,700,000 more cattle were marketed than during these same months in 1916 and the sales were rather heavy then. Only 300,000 of these were sold from the stockyards. This shows that these heavy shipments have been slaughtered and have gone into consumption. This means a 25 per cent increase in the sales in 1917 over these in 1916. The shipments of

calves to market have also been heavier than usual and they have been slaughtered. This heavy marketing of beef animals and calves will certainly have a big effect on prices in the next two or three years. It would seem to indicate that now is a good time to hang onto breeding stock and if possible to increase the production of beef cattle.

THE BEST CROPS

An examination of the best fields in any community brings out the fact that these best fields are on corn or potato ground, land that has been in a hay crop or pasture, or that has been manured. With the exception of the potatoes these are livestock crops, showing that the good grain crop comes in connection with livestock

farming and this is especially true in the adverse season when the crop counts for the most.

ROOFING

Yes Sir! That's what I sell from my 7 factories direct to you. The BEST roofing made at positively the lowest prices. I am a roofing expert—specializing in Roofing materials and supplies—and I guarantee to save you money. Give you a better roofing and a written guarantee.

65c Per Roll for the best one ply roofing, 108 square feet, nails and cement included. No matter what you need in prepared roofing, I can supply you direct at not factory prices.

Send for Big Roofing Book and FREE Samples and be convinced. Now is the time to cover your roof—so send for the book today, sure!

W. E. McCARRON & CO.
112 Dickey Bldg., Chicago
Formerly the Central Roofing & Supply Co.

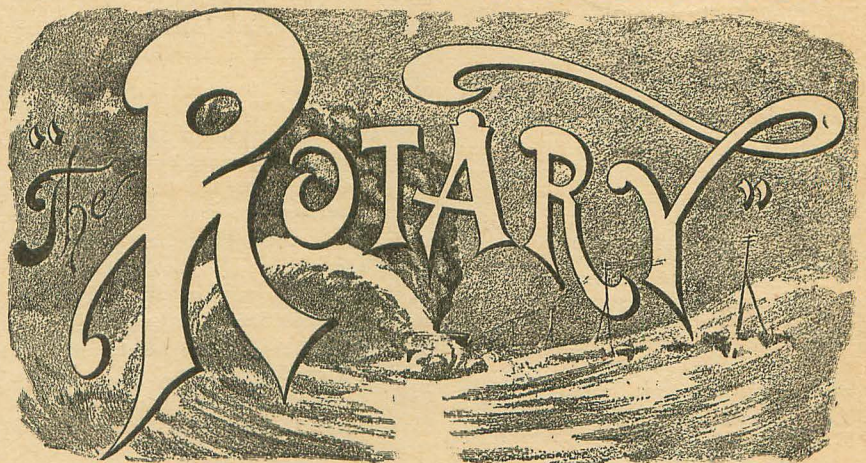
WARNING
Don't buy a roll of roofing from anybody, anywhere, (including myself) unless you get a written guarantee. Don't take anybody's word about quality, make them prove their claims.

W. E. McCarron

These are 20 Year GUARANTEED ROOFS



UNCLE WILL'S MAGAZINE



As the Rotary Plow Clears the Track for Traffic
So the Rotary Magazine Opens up the Avenues of Learning.

The Rotary Follows the New Course of Study

SCHOOL BOARDS ARE ORDERING AS NEVER BEFORE
Order now if you would be sure of the September and October numbers of which we now have plenty.

THE TWENTY-FIRST YEAR BEGAN WITH SEPTEMBER NUMBER
Prices

Single Subscriptions.....\$.50

In Clubs of 3 or more.....40

In Clubs of 20 to one address.....35

School Boards may order 20 or more at 35 cents, and have them sent to the schools under their charge.

There is no greater incentive to the study of language and reading than Uncle Will's Magazine.

ADDRESS

THE ROTARY, BOX F, LISBON, NORTH DAKOTA

North Dakota Farmer

Entered as second class matter at the postoffice at
Lisbon, North Dakota

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ASSOCIATE EDITORS:

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O. O. CHURCHILL C. B. WALDRON
H. O. WERNER

Remittance may be made by draft, check,
money order, or stamps if it will accommodate.

Vol. 19 November, 1917 No. 5

Cull the flock of hens and eat or
market the culls.

Johnny cake has a peculiarly pa-
triotic flavor. Haven't you noticed it?

Because it is easy to sell that family
cow is proof positive that it should
not be done.

The fact that there are 115 million
fewer animals in the world today than
three years ago explains in large
measure why the price of meat is so
high. Besides, we are exporting near-
ly three times as much as normally.

If you would have a sample of the
devastation going on in Europe, just
look about you in the evening and
note the wanton destruction of straw.
You don't have to deliver seditious
and treasonable speeches to be un-
patriotic.

Guard against fire. Enough food
has been burned in this country the
past five and one-half months to feed
a million men for 33 days. Every
citizen should be on the watch for the
elevator incendiary. Also take extra
precaution against accidental fires.

The higher the price of machinery,
the more need of machine sheds.
Draw in under cover that binder, rake,
mower, seeder or other expensive ar-
ticle of farm equipment, then place
on the credit side of your farm ac-
count 5% of their original cost as ac-
tually saved.

Some farmers have made desperate
efforts to exterminate the gophers from
the field, while they board hordes of
rats that prey upon the harvested
grains. According to the Michigan
Farmer every rat costs the farmer
\$1.82 a year. Talk about star board-
ers! Rats are more quiet than the sub
but they are surely destroying many
cargoes of grain every year.

If the land that is loafing should be
taxed double that of the used land
there would be an appreciable in-
crease in revenue or an enormous in-
crease in production. One is startled,
in passing thru the state, to note the
thousands of acres lying idle. While
we do not advocate extensive culti-
vation, we do recommend more farm-
ers cultivating intensively.

If you contemplate building there is
no better time than the present. Tho
the price of lumber seems rather high,
compared with that of former years,
it has not kept pace with other
building material. Be assured that
just as soon as peace is made and re-
construction begins, the price of lum-
ber will soar, exchanging place with
steel and copper, which will then be
on the decline.

Just as the government is slowly
but surely raising and training our
vast army, so it is gradually throttling
the unpatriotic citizens who would
squeeze ungodly gains from war
materials. Speculation in staples and
hoarding are too precarious enterprises
to tempt the avaricious. In the great
winnowing process Mr. Hoover can
not use too fine a screen to suit the
farmers.

While the Division of Meat Adminis-
tration can not guarantee to the farm-
ers the ideal price for pork, equal to
thirteen times the cost of a bushel of
corn, it is their intention so to sta-
bilize the market by limiting the profit
of packer and middleman and elimi-
nating speculation that even with in-
creased production the farmer will be
sure of a good profit. Let there be one
extra litter of pigs, at least, on every
farm in North Dakota.

The farmers of North Dakota as
well as the business and professional
men most patriotically answered the
call for the Second Liberty Loan, and
at the same time proved absolutely
false the charge that they were not
patriotic. Besides, the state, tho some-
what crippled financially thru drought
and cyclone, has just responded with a
contribution of over \$125,000 toward
the Y. M. C. A. War Work. Well
done, North Dakota.

As we have very often expressed in
the columns of this paper during the
past fifteen years, the tillers of the
soil had just cause for combining
against the exploitation of the poli-
ticians and the harmful adulterations
of some food manufacturers. The
North Dakota Farmer favors the co-
operation of the farmers by the farm-
ers, and it stands firm for the Admin-

istration, which it believes is honestly
trying to bring peace thru victory, for
the fair name of our State, and for the
righteous cause for which our boys at
the front are offering their lives.

Many farmers will turn to the rais-
ing of geese now that the grains are
so high priced. The goose does not
require a large amount of grain, is a
good grazer, and is an enemy of
weeds. During the winter such rough-
age as silage, clover, cabbage and
vegetables may be fed.

The usual and most natural sub-
stitute for meat is fish. Fish as a
rule is easily digested, is cheaper than
meat, and there are many varieties
from which to choose. It is neither
cheap nor valuable too far from the
source of supply. Eggs commonly
take the place of meat for luncheon,
not so frequently at dinner. Their
free use depends greatly upon their
price, but when they are forty, fifty
or sixty cents a dozen, the place in
which to economize is in the use of
eggs for cooking, and not in the diet.
Even at sixty cents a dozen, or five
cents each, two eggs are as cheap as a
chop, or an equal quantity of beefsteak.

COOPERATION THAT COUNTS

One hundred nine boys and girls of
Butler, Mo., received thru the Peoples
Bank of that place a like number of
Holstein heifer calves between four
and six weeks old, and one hundred
fifty boys and girls of Clinton, Mo.,
received a similar shipment, thru the
H. P. Faris Trust Company, from the
Edgewood Farms, of Whitewater, Wis.
These shipments were made by ex-
press and arrived at their destination
within 24 hours. The benefits to the
community resulting from these calf
clubs are realized by the banking in-
stitutions that promoted the enter-
prise. Many a bank of North Dakota
would follow suit, if they were not
certain their acts would be impugned.
Fortunately there are still many farm-
ers who will work hand in hand with
the bankers, not only for the prosecu-
tion of the war but also for the up-
building of the livestock industry of
the state. Would that we had one
thousand Boys' and Girls' Calf Clubs
in North Dakota.

A "LITTLE WONDER" PHONOGRAPH

Our offer on page 2 is being ac-
cepted. On Nov. 12 we received the
following words of praise from Miss
Kathryne Stein of Cavalier: The
Vanophone we received O. K. and
surely think it is a "Little Wonder."
Don't fail to investigate.

Livestock Department

FARM AND STOCK NOTES

N. J. Shepherd

It pays to beautify the home grounds.

Breeding animals should be grown not fattened. Much of a horse's power depends upon his temperament.

Too much wood is detrimental to growing fruit.

Heavy feeding does not always produce proportionate gains.

The sow that raises large litters reduces the cost of production.

A common cow may be a good animal but she is not the best.

The only profitable way to feed a horse is to give it all it needs.

No other domestic animal will reproduce itself so quickly and in so great numbers as the hog.

Know just what every cow is doing, is the only safe way to run the dairy business.

The fatter the animal the warmer it will be and the better it can stand cold weather.

In pruning make a clean smooth cut close up to the body of the tree. Long stubs invite decay.

You can improve the quantity of milk by feed, but you must look to the blood to improve its quality.

A ration poor in food ingredients has a tendency to reduce the solids, but not the fat in the milk.

The dairy cow is the greatest soil builder in the world. She keeps all the fertility on the farm.

Orchard trees on well-drained soil are less liable to injury from winter killing than they are on poorly drained soil.

The general condition of the sow's system at the time of breeding has much to do with the size of her litter.

The best time to cut scions for grafting is in the fall after the leaves

have fallen, but before any freezing has taken place.

If nursery trees reach you in a dried out or frozen condition bury them for a short time in the ground to moisten and thaw them out.

Colts should be thoroly trained to the halter and taught that their feet and legs must be handled, curried and brushed clean down to the hoofs.

A reasonable amount of farm work with careful handling will enable a mare to fowl a colt easier and will produce a stronger colt.

With fruit trees the constant effort should be to keep the fruit bearing surface as near the ground as possible. It will make the harvesting of the fruit much easier.

It is very essential in pruning, to make as smooth a cut as possible and make it close and parallel to the trunk so that it will heal over rapidly.

It is a good plan to set the tall plants at the sides of the windows with the smaller ones between. In this way all get an equal chance at the light.

In making up a ration for hogs cost must be taken into consideration and the food given must be such as to produce the greatest number of pounds of gain for the least expenditure.

In the dairy a good feeder is usually a good milker.

The good dairy cow that has been rightly handled has perfect digestion and she turns the best part of her food into milk.

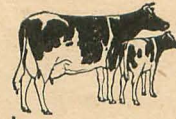
It is a general law of feeding that a cow will require a certain amount of food for growing and maintaining the carcass. And the amount is in proportion to the size of the animal.

The smoother and closer the cut and the more vigorous the growth the more quickly will any damage the pruning may do be repaired and the less likely any fungous disease entering the wound.

While it does not follow that pure bred pigs require greater care than do grades, yet it is a sensible business proposition to give the more valuable animal the more careful attention which is a guarantee of better results.

To handle a load in one place requires the same stamp of muscle, bone and temper as in the other and the colt that will sell well for the city will make money at work on the farm.

In taking up plants to put in the



Purebred Registered
HOLSTEIN
CATTLE

The undeniable facts that the Holstein-Friesian Association of America is the largest and most prosperous dairy cattle association in America, that its membership is over 7,000 more than the combined memberships of the other dairy cattle associations, and that it increased its membership by 1,260 during the fiscal year ending April 30, 1916, are primarily a fitting testimonial to the superior merits of the purebred Holstein-Friesian cow, that yields more milk for a day, for a year, for a life-time and for profit than any other cow. There is big money in the big "Black and White" Holsteins.

Send for FREE Illustrated Descriptive Booklets
Holstein-Friesian Association of America
F. L. Houghton, Sec'y Box 267, Brattleboro, Vt.

ENVILLA STOCK FARM

Cogswell, N. D.

Will quote you special prices at any time on Angus Cattle, Feeding and Breeding Sheep, Shetland Ponies, Duroc Jersey Hogs, Wolf Hounds, Collies, Rat, Bird Dogs and other breeds, Angora Cats. All varieties of chickens, turkeys, geese, ducks, guineas, pheasants, rabbits, ferrets, Pets Live Foxes, Skunks, Mink and Badgers.

Bixby's Red Polls

My herd bull, J. D. Merryweather, No. 24396, is the son of J. D. Millie, A. R. Grand Champion cow at Minnesota and Montana, in the 1915 show-ring and won the milk and butter contest with Guernseys, Jerseys and Brown Swiss competing with records of 600 pounds butterfat. J. D. Millie weighed 1280 pounds at thirty months old, and is full sister to the World's Champion two-year-old heifer.

J. S. BIXBY, : : LISBON, N. D.

REGISTERED SHROPSHIRE AND HAMPSHIRE RAMS; also a limited number of ewes for sale; also Polled Durham Bulls, and Canadian Wild Geese. Our stock won many prizes at the North Dakota State Fairs the last three years. Price, reasonable. H. A. Strutz, Thompson, North Dakota.

A. R. BRED BULLS PRICED TO SELL. We are completely sold out of RED POLL bulls for the present but are offering a few choice GUERNSEY bulls, outstanding individuals of serviceable age, at from \$100 up. Write for folder describing the remarkable show ring winnings and production records back of our herd. Jean Du Luth Farm, Duluth, Minn.

Holstein Calves

10 heifers, and 2 bulls, 15-16ths pure, 5 weeks old, nicely marked and from heavy milkers \$20.00 each, crated for shipment anywhere. Edgewood Farms, Whitewater, Wis.

HOLSTEIN AND GUERNSEY HEIFER AND BULL CALVES. Choice selected promising dairy calves, practically pure Holstein and pure Guernsey, but not registered, nice color. \$20.00 each, all express paid to any point in North Dakota and adjoining states. Order two, you will be so well pleased you will want more.—Meadow Glen Yards, Whitewater, Wisconsin.

PERCHERONS

If you want a real good young stallion or mare you should come to my barn. You can buy at a lower price at the barn than anywhere else. All home raised and used to Dakota conditions. A square deal guaranteed.

Wm. Steinbach, : : New Rockford, N. D.

Now is the TIME and this is the PLACE to buy

Shetland Ponies

FOR THE CHILDREN

Write your wants to

DR. J. A. H. WINSLOE, COOPERSTOWN, N. D.



GET RID OF

Worms and Bots

You can remove every one of them. We guarantee to kill and bring from the body, dead, in a very short time, all pin worms and bots, with the safe and sure remedy.

NEWVERMIFUGE

Absolutely harmless. Can be given to mares in foal before the eighth month. Horse owners write us that Newvermifuge has removed from 500 to 800 bots and worms from a single horse. An animal that is wormy can't help but be ugly and thin. If your horses are troubled with worms send us your order today. Price \$2.00 for 12 Capsules. **BALLING GUN FREE** with 4 dozen \$3.00, with 2 dozen \$5.00. Postage paid.

Farmer's Horse Remedy Company,
Dept. B2, 592 7th Street. Milwaukee, Wis.

windows be careful about the roots. If they are maltreated in any way be sure to cut off all the bruised parts and shorten in a corresponding way the top branches of the plants.

A variety of fruit may differ in its keeping quality when grown in different parts of the country. It may vary when grown in the same locality under different cultural conditions.

The character of the soil, the age of

the trees, the care of the orchard—all of these factors modify the growth of the trees and fruit and may affect the keeping quality. The character of the season also modifies the keeping power of the fruit.

WINTERING EWES

**Save Grain by Feeding Legumes—
Other Hays Require Protein Supplement.**

Sheep can be successfully wintered with a smaller use of grain than is needed for other live stock. If in good condition at the beginning of winter and given the right kind of hay they can be carried thru the winter without grain unless the lambs are to be dropped before going to pasture. All depends upon the kind of hay or other roughage used.

Legume hays stand at the forefront as a roughage for sheep. No other roughages approach them in feeding values. The coarse-stemmed hays like timothy, red top and bluegrass have very few leaves and therefore are poor sheep feeds. Hays having a large amount of timothy in them also are undesirable. Not only is timothy unpalatable to the sheep, but it causes serious cases of constipation. The dry timothy heads work into the wool, causing irritation to the skin, lessening the value of the clip and making shearing difficult. When timothy or other coarse-stemmed hay is fed to heep in winter quarters it becomes necessary to use some supplementary feed to keep the sheep in condition.

Linseed Meal as a Supplement

If any nonlegume hay is fed, supplementary protein feed is needed. Linseed meal is good since in addition to furnishing protein it counteracts the constipating effect of timothy hay. From one-quarter to one-half pound of lined meal per ewe daily should be used, depending upon the size and condition of the animal and the other feed used.

In an experiment conducted at the Missouri station and reported in bulletin No. 120, the relative values of clover and timothy hays for wintering ewes were determined.

Fifteen ewes fed 2.9 pounds timothy hay and 0.35 pound grain per head daily lost 7.6 pounds each during the same time that another lot receiving the same weight of grain and clover hay gained 6.5 pounds. The 14 ewes fed clover hay dropped 16 strong lambs, while those fed timothy dropped 11 strong and 5 weak lambs. The lambs from the ewes fed clover hay gained more rapidly during the first 30 days than did those from the ewes fed timothy hay.

NORTHERN MINNESOTA AND THE SHEEP INDUSTRY

On October 8th and 9th a meeting of farmers, bankers and others interested in the development of the sheep and wool industry in Northern Minnesota was held at Bemidji in the Commercial Club rooms, and the Northern Minnesota Sheep Growers' Association organized. This meeting was called at the instance of the Bemidji Commercial Club and altho only ten days was allowed the Secretary of the Club to advertise the meeting, the splendid assistance given by the press of Northern Minnesota, the Twin City Dailies and the associated Press resulted in representatives from practically every county in Northern Minnesota being present when the convention opened.

The Convention was called for the purpose of working out a plan which could be used in every locality to place breeding ewes in small numbers in the hands of farmers who were prepared to care for them but did not have the available cash or bank credit to secure them, and also to get a working organization which would secure such ewes at cost for not only those who were unable to buy but also those who had the cash or credit but were unable to secure desirable ewes locally.

Those who attended the convention did not come for a talk fest and from the start worked to accomplish the purpose of the convention. The plan that was worked out can be used in any community anywhere and is so good that it ought to be of interest and value to every citizen in the United States. The resolutions adopted by the convention are mainly the embodiment of this plan and are there fore printed in full.

An executive committee consisting of the following was formed:

Officers: President, J. J. Opsahl, Bemidji, Minn.; Vice Pres., Daniel De Lury, Walker, Minn.; Secretary, E. H. Winter, Bemidji, Minn.; Treasurer, Glenn Strader, Grand Rapids, Minn.

Directors: Charles Scheers, Akeley, Minn.; S. D. Patrick, Deer River, Minn.; M. F. Jamar, Duluth, Minn.; Chas. Hayden, Blackduck, Minn.; J. E. Cowen, Northome, Minn.; C. L. Dixon, Cloquet, Minn.

Transportation: T. A. Hoverstad, Soo Line; D. E. Willard, Northern Pacific; J. V. Delaney, Milwaukee; J. H. Griffen, Great Northern.

Mr. D. E. Willard, of the Northern Pacific Railroad, voiced the opinion of other prominent men attending the convention when he said: "I have attended conventions of various kinds

CLASSIFIED ADS.

One Cent a Word

Small advertisements will be classified under appropriate headings at the low price of one cent a word for each insertion. Cash must accompany all orders. Each initial or number must count as one word TRY IT HERE.

ROCKY HILL SHROPSHIRE

Home of Iroquois Covington, one of best sons of Butter's Best Get. Yearling rams and ewes for sale Also aged rams and ewes. E. A. Paley, Hope, N. D.

Furs and Hides Wanted, highest prices paid, honest assortment, prompt returns, get my prices before you sell a pelt, it will pay you well Start the season right. A trial shipment will convince you. Furs held separate on request. C. L. Buckingham, Ridgeway, Wisconsin.

Hotel for Sale. The Alkabo Hotel at Alkabo, North Dakota will sell Cheap if taken at once. Inquire of owner or First State Bank of Alkabo, North Dakota. O. L. Olson, Owner, Alkabo, North Dakota.

TEACHERS WANTED for all kinds of positions. Free enrollment. Send for blanks. School officials supplied with competent teachers. Write for list of candidates. Eastern Educational Bureau, New Egypt, N. J.

33 MAGAZINES—Monthlies, Weeklies, Fiction, Pictorial—all kinds; a winter's reading; 25 cents, prepaid. Hutchins Magazine Agency, Box 227, Summerville, Ga.

COTTON SEED

Beautify your lawn with cotton blooms, will send package of cotton seed with full instruction how to grow it for only 10 cents (coin) W. Wadd Buntin, Seed & Plant Grower, Box 129, Dept. N., Starkville, Miss.

EXPERT LITERARY SERVICE. Famous staff writers, authors and poets will write your stories, speeches, poems, plays, songs, etc. You may use as you please with copyright privileges. Young authors' work revised and rewritten. Charges reasonable. Literary advice and counsel. Folder free. Eastern Educational Bureau, Literary Dept. New Egypt, N. J.

WANTED—Old false teeth, any condition. I pay \$2 to \$16 for full sets, parts in proportion. C. A. Wright, Hartford City, Ind.

WANTED—To hear from owner of farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

Auto, Tractor, Engine Owners. The "Instanto" Gauge-Tester measures your gasoline; tests spark plugs battery, magneto; instantly locates ignition troubles; saves time; needed daily; 25 cts. postpaid. Agents wanted. Gastine Sales Co., Box 348, Summerville, Ga.

MISSOURI AUCTION SCHOOL

FREE CATALOG KANSAS CITY, MO.

WANTED. Live Foxes, Skunks, Mink and Badgers, any time. Envilla Stock Farm, Cogswell, N. D.

Wanted to hear from owner of good farm for sale. State cash price, full description. D. F. Bush, Minneapolis, Minn.

30 DIFFERENT MAGAZINES. All late issues. Yours for only 25 cts. prepaid. Great help in teaching Satisfaction guaranteed. Eastern Bureau, New Egypt, N. J.

If you have livestock to sell, you can reach a buyer thru the ad columns of the N. D. F.

called to promote different enterprises and I can freely say that the Bemidji convention is the most promising gathering I have ever attended. There is a first class chance that the convention will obtain the result sought in the call, an organization of wool growers that will secure and place sheep on our idle Minnesota lands."

Mr. T. A. Hoverstad, of the Soo Railway, said: "My knowledge of Northern Minnesota is such that I regard it as a favored region for sheep raising. The soil is adapted to the raising of root crops and clover, wild peas, wild vetches and other forage grow naturally in great abundance. This makes it possible to pasture more sheep to the acre than in many parts of the Union where the industry is firmly established."

The Bemidji convention promises to be an epoch making event in development of Northern Minnesota, and is destined to prompt organizations of a similar nature in North Dakota.

EARN CHAMPIONSHIP AGAINST ODDS

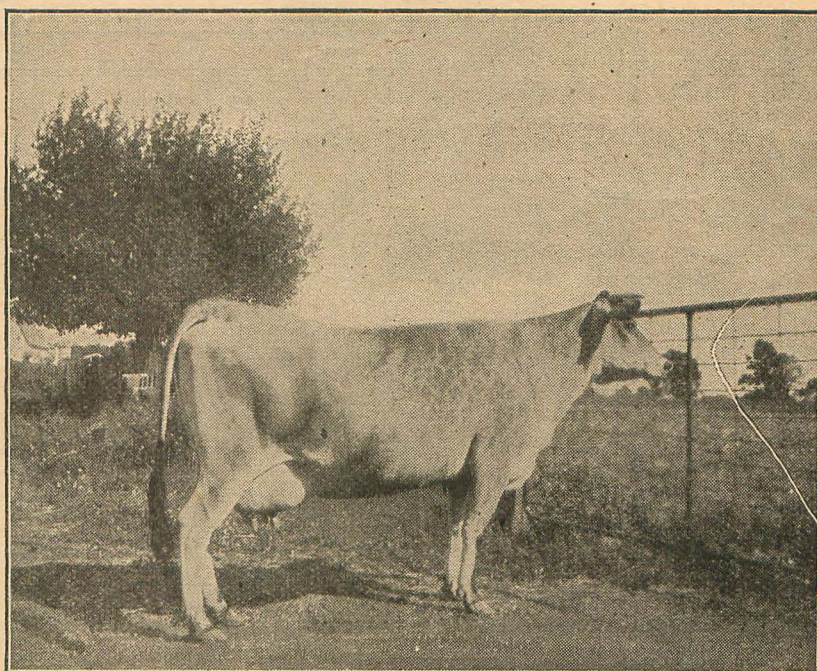
Steady production of fat has placed Sophie's Dolly Dimple 34582 in the front of her class in the State of Ohio. This Jersey heifer, starting on test at two years and three months of age, has won the title of Ohio Champion junior two-year old, by producing 10,813.9 lbs. of milk, containing 689.68 lbs. of fat, or 862.1 lbs. of 80% butter. Persistency was Dolly's chief asset in the making of this great record. Her start was ordinary, and at no time was her production for a single day in excess of what

other heifers of the same age have produced. Sophie's Dolly Dimple, instead of having the usual decrease in production as her lactation grew, increased her yield until in the eighth, ninth and tenth months her maximum output of butter-fat was reached. It is truly remarkable for a heifer with first calf to exceed the production of her first six months of lactation in her second six months, and this Dolly did by over twenty pounds.

When all things are considered, Dolly could not be expected to do anything but produce for she comes of a family of producers. Her sire is Pogis 99th of Hood Farm, son of Sophie 19th of Hood Farm, the world's champion long-distance cow. Pogis 99th has proven himself to be a most promising young Jersey sire, and has already twenty-five daughters in

A remarkable temperament and her enormous appetite when combined with her inherited producing qualities, made it easy work for Sophie's Dolly Dimple. Dolly gained in production in spite of many obstacles, such as starting her test with a badly-swollen udder, which needed constant attention for several months, having as many as four different men milk her during one stretch of a few weeks when her regular milker had taken sick, and having a sick cow across the alley-way from her for a period of three weeks with the lights around the barn burning nearly all night.

Seemed to thrive on excitement, and her appetite was always keen. After consuming her entire grain ration and seeing she was to receive no more, Dolly would turn to the roughage and clean out the entire rack of alfalfa



Sophie's Dolly Dimple

PRINCIPLES AND PRACTICE OF MILK HYGIENE

By Louis A. Klein, V. M. D.
Published by J. B. Lippincott
Company, Philadelphia.

This is a new work just published and while intended as a text for students it is serviceable and should be interesting to all interested in the production and selling of wholesome milk. It treats of the Physiology of milk secretion; chemical properties, bacteria, milk defects, influence of disease upon milk, pasteurization, methods of examining milk.

Over 300 pages including appendix; 41 illustrations.

It looks as tho the author had covered the whole subject of "Milk" and treated his subject ably and thoroly.

It is one of the best books for the dairyman as well as the student published.

Ad.

the Register of Merit, including two of the present world's champions. Dolly's dam is Lass 57th of Hood Farm, a daughter of the famous Hood Farm Torono, sire of seventy-six daughters in the Register of Merit, with a Register of Merit record herself of 9,844.2 lbs. of milk, containing 547.7 lbs. of fat at two years of age. Dolly is a full sister to Sophie's Cora, 8,589.1 lbs. of milk, containing 499.64 lbs. of fat as a two-year-old, and a three-quarter sister to such cows as Sophie's Adora, junior four-year-old champion, 15,852.2 lbs. of milk containing 888 lbs. of fat, and Sophie's Bertha, junior three-year-old champion, 14,954.2 lbs. of milk containing 829.54 lbs. of fat. She is truly of a producing family.

hay, and then look for more.

Her production has not only shown her to be the best Ohio junior two-year-old, but has also earned her a place among the best five junior two-year-olds of the Jersey breed, replacing the former Ohio champion, Lipsa, whose production is 11,509.3 lbs. of milk, containing 684.32 lbs. of fat. Sophie's Dolly Dimple is owned by Mr. Hugh W. Bonnell, of Youngtown, Ohio. Mr. Bonnell thinks so highly of her that her bull calf by Sophie 19th's Tormentor, also a son of that famous Jersey Sophie 19th of Hood Farm, will be the next herd sire in Mr. Bonnell's herd, as he considers Dolly an ideal dam. This makes the calf a grandson and a great-grandson of Sophie 19th.

WILL IT PAY TO INCREASE LIVESTOCK?

Every farmer is wondering whether or not, under present conditions of abnormal feed prices and abnormal meat prices, he can afford to increase the livestock population of his farm. E. A. Trowbridge who is connected with the University of Missouri College of Agriculture has made a brief survey of the livestock situation at present. The following is a summary of this survey.

All the advantages of livestock production in normal times, such as maintenance of soil fertility, equalization of labor, employment of capital and the utilization of otherwise unmarketable feed, still exist. These advantages are enhanced by war time.

Professor Trowbridge has found, from the data he has compiled, that there has been some decrease of livestock per capita in this country during the last five years. While cattle generally have increased at about the same rate as the human population during that period, sheep have actually decreased and hogs have increased only a small per cent. The human population has increased 8 to 10 per cent, cattle 8 to 10 per cent, hogs only 2 to 4 per cent and sheep have decreased 7 to 8 per cent. During this fall an additional hog shortage is evident. A further shortage of meat animals has been caused by an increase in exports. During 1916 the animal products exports from this country were nearly 100 per cent higher than those during 1911. In cases of some specific items the increase in exports is even more than 100 per cent. It is likely that exports will be heavy after the war, because for several years Europe will be unable to supply either the food or the animals for home consumption. During the war the United States must export as much meat as can be spared.

A review of animal consumption of meat per person indicates, when the prices which obtained during last year are considered, that the supply of meat is not equal to the demand at this time.

Professor Trowbridge offers further considerations of the livestock situation: Animal products constitute a food reserve. Unlike any other perishable products they may be kept over indefinitely or they may be preserved for use at a definite time. Domestic animals can convert into human food those products which otherwise are wasted. Well directed, properly managed, livestock farming has been made and can be made profitable.

"It would seem clear from a review of the situation," said Professor Trowbridge, "that increased livestock production is indicated, and it is evident that it is a source of food essential for the welfare and safety of this nation at this time. Preponderance of evidence indicates that increased livestock production may be carried on very satisfactorily and profitably. This statement does not mean that it is safe for the average man to engage in speculative livestock ventures."

The great factors to be considered in increasing livestock production are increase in numbers and increase in quality. This may be accomplished, said Professor Trowbridge, by: 1. The

use of good sires; 2. The use of satisfactory breeding females, which give evidence of being regular breeders and which are increasing rather than depreciating in value; 3. The maintenance of breeding animals in good breeding condition, neither too fat nor too lean, and by the utilization of roughage and forage to the greatest possible extent; 4. By giving special attention to breeding animals at the breeding season and taking special care to see that every breeding female is safely pregnant, and that irregular breeders are eliminated; 5. By saving newly born animals by proper care and attention at parturition.



Poultry Department



EGG ANALYSIS AND OTHER MATTERS

By Michael K. Boyer

Analysis tells us that the shells of duck eggs are the thinnest, being about 10.6 per cent of the whole weight of the egg. The average of 34 samples of hens' eggs gave 11.2 per cent for shell. Turkey eggs ran slightly above hen eggs in this respect, having an average of 11.4 per cent of the whole weight. The shells of the goose eggs averaged 12.8 per cent of all, while the shells of Guinea eggs form 14.4 per cent of their weight.

Whites of the eggs, in proportion to their total weight, ran: Goose, 52.6; duck, 53.6; Guinea, 53.6; Turkey, 56.5.

The proportion of yolk to the whole egg ran: Guinea, 32; duck, 33; goose, 34.6; turkey, 30.1.

About 70 per cent of the edible portion of eggs is pure water.

The protein content is about 14 per cent, the fat about the same. This makes eggs a very valuable food. Most of the protein is in the whites of eggs, and most of the fat in the yolks.

Taking the eggs as a whole, including the shell, the fat content ranges from about nine per cent in turkey, hen and Guinea eggs, to over 12 in the eggs of ducks and geese.

The protein content runs from 11 to 13 per cent in eggs of all varieties of fowls named. There is really little difference in the nutritive value of the different kinds of eggs named.

The white of an egg is nearly seven-eighths water, the remainder being pure albumen. The yolk is slightly

less than one-half water. These figures apply approximately to the eggs of turkeys, hens, geese, ducks and Guinea fowls.

To show how nearly alike the eggs of various domestic fowls are in respect to composition, the following figures are given by the Department of Agriculture:

Hen's egg—50 per cent water, 16 per cent protein, 33 per cent fat.

Duck's egg—46 per cent water, 17 per cent protein, 36 per cent fat.

Goose egg—44 per cent water, 19 per cent protein, 36 per cent fat.

Turkey egg—48 per cent water, 18 per cent protein, 33 per cent fat.

Reviewing this statement, the Saturday Evening Post says it should be explained that "protein" is the stuff that goes to make muscle and blood. Fat, of course, is fuel for running the body machine. Thus it will be seen that eggs, tho half, or nearly half, water, are extremely nutritious, containing all the elements required for the building and support of the human body. But the old saying that an egg contains as much nutriment as a pound of beefsteak is far from correct. It would be nearer the fact to estimate that a pound of eggs is equal to a pound of lean beefsteak in nourishing power.

During the time of the year when eggs are selling at a low figure, many farmers hold back their crop in the hope that the prices will shortly advance. This gives a lot of stale eggs, which, however, the expert candler at the commission house is able to detect, and the returns to the farmer are rendered accordingly.

A Boston letter to the New York Produce Review says:

"There is great danger in advancing

the price of current receipts in the country, as they contain such a large proportion of farmers' held stock at the summer season of the year. In years gone by these goods could be worked off for practically fresh stock, but the trade has been educated up to the fact that the farmers' held stock (eggs) are not worth nearly as much as the storage held stock, and the per cent of the new laid eggs in the current receipts is so small that it makes them very hard sellers in competition with storage eggs, and stock.

"Another reason why the current receipts are hard sellers now is because refrigerating companies have had experience holding their goods, and are turning out stock that is far superior to years gone by, and today it is easier to satisfy our fine trade with eggs from the store house than it is with goods taken from the average current receipts being received by the packers."

One can hardly go into the candling room of our egg receivers during summer and see the great majority of badly shrunken, weak-bodied eggs coming to market as "fresh" without being impressed with the fact that there must be something radically wrong with a system of egg marketing which leads to such a woeful loss of quality, between the producer and the consumer.

When such poor, weak and shrunken eggs reach the market they are of less value than good refrigerator eggs, and nine times out of ten they are worth less than they would have been if sent to market when they were freshly laid. Why, then, are they continually held under such conditions?

The answer to this question discloses the fault in the system of marketing which is responsible for the practice of country holding under adverse conditions; it is simply that the low value of these country held eggs is not made apparent to the people who hold them.

Eggs are commonly bought from farmers and from country storekeepers at an average price; some of them may be worth five and ten cents a dozen more than others, yet a lump price is paid for the whole batch; and if this average price is higher in October and November than it was in late August and September, the chap that held a lot of stock in his cellar for four to eight weeks thinks he has made money by so doing, even when the loss of quality really amounted to more than the apparent advance in value; and when, if the different qualities of eggs were bought from such people at their real value the

truth would appear that these stal shrunken eggs had really lost in market value.

The main necessity to bring out the result is for egg collectors who buy from the country storekeepers to buy "loss off" and to fix their paying prices upon the basis of quality. If these storekeepers found that they could get say 24 cents for fresh laid eggs, and only about 14 to 15 cents for stale, shrunken stock which would have brought them 15 to 16 cents, when fresh, they would not be likely to hold; and if they realized that there was such a difference in value they would perhaps find a way to deal with the farmers on the same basis.

If it is "impractical" to make this reform in the method of country buying, then there is little hope of stopping the injurious practice of country holding, which brings the appearance of profit but not the reality.

CAN THE COCKERELS

Can the cockerels when it no longer pays to feed them, is the advice the United States Department of Agriculture is giving to the boys and girls of the poultry clubs in the north and west. Canning saves feed and puts on the pantry shelves material for a chicken dinner when poultry is highest in price. This is the method taught to the club members:

Kill fowl, dress at once, cool; wash thoroly, draw, then cut into convenient sections. Dip into cold water to insure cleanliness. Place in wire basket or cheesecloth and boil until meat can be removed from bones easily. Then remove from boiling liquid to separate the meat from bones. Take the meat off in as large sections as possible; pack hot meat into hot glass jars or enameled cans; fill jars with pot liquid after it has been concentrated one-half; add level teaspoonful of salt per quart of meat, for seasoning; put rubbers, and caps of jars into position, not tight. Cap and tip tin cans. Sterilize for the length of time given below for the particular type outfit used.

Water bath, homemade or commercial (quart jars) 3½ hours.

Water seal, 214 degrees, 3 hours.
5 pounds steam pressure, 2 hours.
10 to 15 lbs. steam pressure, 1 hour.

Remove jars, tighten covers; invert to cool and test joints.

Caution: Only the very best types of rubbers should be used.

The feed hopper should be placed at least six inches from the floor, so that the hens cannot easily scratch dirt or litter in it.

Nitrogenous food will grow bone and muscle; carbonaceous food makes fat.

The best roots for grinding for poultry food are potatoes, turnips and beets.

In feeding dry mash, it is best to give it in hoppers instead of troughs, as when fed in the latter, the hens throw out a lot in search of more tempting ingredients.

Pullets very often are slow at starting to lay owing to becoming too fat. In growing pullets there should be more nitrogenous and less carbonaceous food given them.

The ration for summer and winter feeding can be exactly alike, excepting that in winter there should be more heating food, like corn. Formulas have from time to time been given in these columns.

Linseed meal is a by-product of the manufacture of linseed oil from flax seed. Linseed meal contains a high percentage of protein. Flaxseed cooked or ground may be fed to poultry, but it contains more oil than linseed meal and should be fed sparingly.

BIG MISSOURI ROSE COMB RHODE ISLAND REDS. Three choice pens. Five eggs from each pen for \$1.50. Blue Ribbon Strain, heavy winter layers. J. C. Guyer, Mandan, North Dakota.

Barred Rock Cockerels direct from winners at Crookston and St. Cloud, \$1.50 to \$2.50 before Christmas. Laurel Hill Farm, Westby, Montana.

EGGS for Hatching from our prize winning Rose Comb Brown Leghorns, Rose Comb Rhode Island Reds and Single Comb Black Minorcas. \$2.00 per 15. Peter H. Leyey, Fountain, Minn.

EGGS. PURE BRED S. C. W. Leghorn. Golden, White, Partridge, and Silver-laced Wyandottes. Rose Comb Island Red. Guineas. Runner and Pekin Ducks. Setting \$1.25; 100, \$6.00. B. Turkey, nine \$2.50. All eggs prepaid.

JOSIE ZENG

Walnut Grove, : : : Minn.

White and Columbia Wyandottes, Light Brahmas, and S. C. White Leghorns Over 30 years a breeder. Stock and eggs for sale. MICHAEL K. BOYER, Box 27, Hammon New Jersey.

Hatching Eggs from a good strain of Pure Bred S. C. Rhode Island Reds, 15 for \$1.50; also a few Cock Birds and Cockerels for sale. E. N. Hedahl, Mercer, N. D.

FOR SALE. Well Bred Up R. C. Reds. First prize winners; cockerels, \$1.25. Mrs. John Henderson, Bx 228, Beulah, N. D.

PUREBRED BARRED PLYMOUTH ROCK eggs. One setting of 13, \$75. 100 eggs, \$4.50 prepaid. Otto L. Albertson, Nunda, S. D.

White Langshan eggs, \$3.50 setting, F. Runner Ducks \$1.50 setting. Selma Shanander Dayton, Iowa.

FOR SALE. Silver-Laced Wyandottes. Eggs and baby chicks. Mrs. Thos. Brady, Lansford, N. D.

Quality White Rocks

Hatching Eggs and Stock in season. We have the Best. O. A. Barton, Valley City, N. D.

School and Home

SEWING IN THE RURAL SCHOOL

By Leontina Pecinovsky, Antelope Consolidated School, Mooreton, North Dakota

We often hear the remark from our men teachers in the rural school, "I can't teach sewing so don't talk sewing to me." If the teacher cannot teach sewing why not make a bargain with the lady teacher from the neighboring school. She may have the problem of what to do with the boys while the girls sew. Have her teach sewing to the girls from the two schools while you teach rope work, wood-carving or the like to the boys. An arrangement could be easily made whereby one school could visit the other one on every other Friday after-

noon or if good lights are to be had this work could be done in the evening and a light luncheon could be served by the girls before going home.

This article is a continuation of the article given in the October "North Dakota Farmer." In the last article we left off with the making of the little kitchen apron. This month's article will treat of the making of the rest of the doll garments for Sewing I.

For the **night-gown** take a piece of muslin 9 inches wide and 22 inches long. Fold the long way and then across. Cut along dotted lines as shown in illustration.

Sew up the underarm seams with a French seam. Hem with a narrow hem. Turn a narrow hem around the sleeves and neck and finish with a narrow rick-rack braid or a little crocheted edge.

The **kimono** may be cut the same way as the nightgown. After sewing up the underarm seams, cut down the front for the opening. Use cotton

kimono crepe and finish the front, neck and sleeves with contrasting colored material. A little square sailor collar may be added.

For the **petticoat** use muslin or long cloth. Take two pieces each five and one-half inches by nine inches. Fold in half making each piece five and one-half inches by four and one-half inches. Cut on dotted lines.

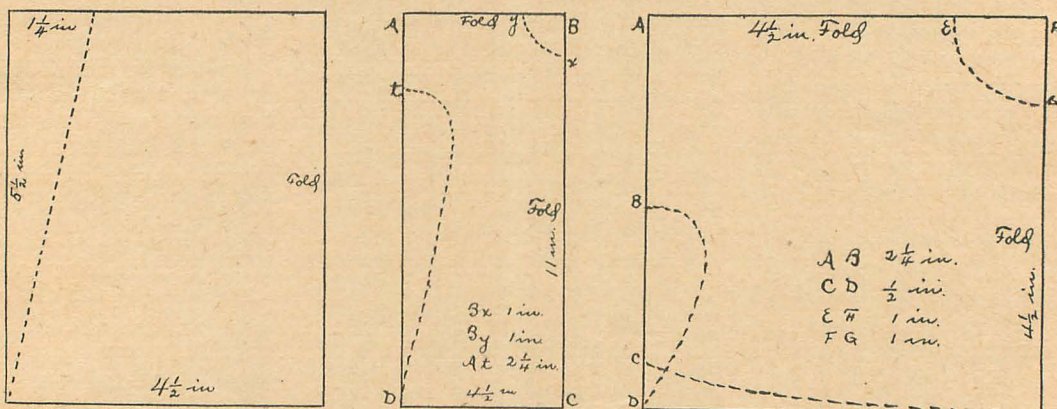
Sew seams together with a French or felled seam. Make a one and one-fourth-inch placket at the back. Gather slightly at the top and sew on the band. Hem with a one-fourth inch hem. A one and one-half inch ruffle may be sewed on.

For the **drawers, corset cover,** and **chemise** use muslin or longcloth or cotton crepe may be used but that is a little harder to sew and more ex-

Make button-holes in the front shoulder flaps and sew on buttons on the back flaps.

The **gingham dress** may be cut like the night gown and made somewhat in the same way. Make a two and one-half-inch opening in the back and finish with a placket. Make button-holes and sew on buttons on the opposite side. Sew little straps for a belt under the arms. Make a belt three-fourth inch wide and the length desired. Finish it with a button and button-hole. Slip thru the straps of the dress.

For the **skirt of the lawn dress** cut a piece of lawn four and one-half inches long and twenty inches wide. Sew the two four and one-half inches edges together with a French seam leaving an opening for the placket. Finish the placket and gather the skirt into a belt. Sew the belt firmly down then turn and sew it down on the other side making a neat finish. For the **waist** take a piece of goods 9 inches long and 9 inches wide. Fold over in half and then across. Cut on



pensive. Cut these three articles according to pattern. The under arm seams of the **corset cover** may be sewed with a French or felled seam. Hem the two front sides with a narrow hem. Hem the top and arm holes with a narrow hem and finish with narrow rick-rack braid or crochet edge. Finish the bottom with a belt. Gather the corset cover into the belts very little at the back and more in front. Make button holes and sew on buttons.

Sew the **drawers** seams with a felled seam. Make a one-inch cut on each side from the top and finish each as a placket. Gather slightly at the top into a belt. Hem the bottom with a fourth-inch hem. Trim with lace or rickrack braid.

Sew the **chemise** underarm seams with a French or felled seam. Make one-fourth-inch hem at the bottom. Finish top and armholes with a narrow hem and then crochet on a narrow edge or sew on rick-rack braid.

dotted lines as illustrated.

Cut on the fold of the back and hem. Sew up under arm seam with a French seam. Gather the sleeves into little narrow cuffs. Gather or shirr slightly around the neck. Gather the bottom and after cutting the top of the skirt belt open sew the waist to one side of the belt, then sew the other side of the belt over the raw finish thus making a neat finish. Hem the skirt and finish with buttons or hooks and eyes, narrow lace may be used to trim the neck and cuffs.

Next month's article will tell about sewing for the eighth graders who have completed Sewing I. or for the first year of high school. The garments to be made in Sewing II. will be named and also the article will tell how the sewing class may help the Red Cross.

The following is a list of books which you will find helpful in Domestic Art:

A Sewing Course by Mrs. Woolman, Published by Fenald, 217 W. Utica

St., Buffalo, N. Y. Dressmaking Up-to-Date, Butterick Publishing Co. Goodwin's Sewing Course, Published by Fr. D. Beattys & Co., 225 Fifth Ave., N. Y. City. Domestic Art in Woman's Education by Anna Cooley, Published by Scribner & Sons, 1911.

HEROIC WOMEN OF FRANCE

By Dr. Alonzo Taylor
From an address delivered recently in Washington under the auspices of the U. S. Food Administration.

My words are not powerful enough to do even scanty justice to the most heroic figure in the modern world, and of ages past—the woman of France.

Of the healthy men who are not engaged in the military service in France, practically all of them are engaged either in transportation or in the manufacture of munitions, leaving the agriculture absolutely to the women. Not only this, but they have stepped into the place of work animals; you can go into any section of France today and see women of magnificent, noble womanhood hitched to the plow and cultivating the soil. All of the agriculture rests upon their shoulders. The home, always an extremely efficient home, maintains a few old men, the wounded and the tubercular. Uncomplaining, with high devotion, with an attitude that amounts almost to religious exaltation the woman of France bears the burden.

Now, conditions being as they are, does it lie within the heart of the American people to preserve and hold to every convenience of our life at the expense of adding an additional burden to the womanhood of France? This is the exact question that is involved in our substitution of other cereals in place of wheat.

The women of France must be enabled to hold up the morale of the French soldier until next spring. The morale of the house decides the morale of the soldier in the fighting line. We can do this by giving them the greatest possible freedom in their food supply, and of this wheat is the chief factor.

THE STRAIGHT SILHOUETTE STILL A FAVORITE

Accessories that Hint of Winter

There is no telling where the fad for matching the hat, scarf and muff will end. Indeed, it is one of the most important features of the present style,

whether the material used be fur, wool or knitted affairs. Scotch wool embroidered in thistles or some other appropriate conventional design is very popular. The cravat is quite long enough to wrap around the neck twice and cross in the front or the back. Of course, the charm of these sports accessories is the air of carelessness with which they are worn!



The Distinction of Pleats and Buttons

One attractive set was of beige duvetyn; soft-brimmed hat, long scarf lined with blue, and tiny muff of the same soft tan with the blue, showing at the ends. Capes are very popular, too, short ones on the order of those worn by the cavaliers of old. These are of black velvet, fur or plush, and are usually very becoming. Beaver is a favorite fur for these sets; squirrel, rabbit and moleskin are much worn, too. The vest of olden times has returned to favor in many attractive forms.

Stenciling to the Front!

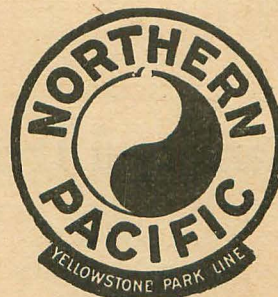
A new idea for the decoration of evening dresses is really a return of the old art of stenciling. The soft lustrous silks and taffetas, and even velvets, have stenciled designs on the skirts and waists. One charming gown of apricot charmeuse had bluebirds stenciled on the bodice. How could one help being the belle of the ball with such a happy start? The love of the quaint gingham patterns is

still apparent. One charming dress in a new play was of rose chiffon in a gingham design.

The Straight and Narrow Way

There are several prominent designers who absolutely ignore the well-launched bustle, declaring that there is only one way to fashion, the straight and narrow way! In this season of contradictions they have many followers, so one may speak with scorn of the bustle if it does not happen to appeal to one, or (of far more importance) if it is unbecoming. Straight pleated skirts in instep length, simple waists and long tight sleeves are the earmarks of the straight dress of 1917. The one illustrated here is one of those designs that appeal to the woman of good taste. The dress buttons down the center-back, with more buttons on the sleeves and shoulders. The buttons and the touch of embroidery on the belt are the only trimmings used. It is simple and dignified, and appropriate for many occasions.

Jersey cloth still continues very popular for a dress of this type. Another charming model developed in this same material was of raisin color. The skirt was shirred round the hips, with a single pocket buttoned at the seam on the left side with raisin glass



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buttons; the bodice, wide girdle and hip-length coat had these same buttons in different widths.

High collars are much in vogue, some are of the same material as the costume, with net ruchings; others are of net or lace with deep jabots. One of the big shops here in New York is featuring a collar-and-cuff set of tan material on the order of ratine, embroidered in flame or saxe blue in an effective design.

REMOVE THOSE STAINS

Government Tells How to Remove Spots from Garments and Fabrics

To give clothes a longer period of service, and to conserve garments or fabrics which may appear to be hopelessly stained, is the object of a new publication just issued by the United States Department of Agriculture.

Lady Macbeth might have had less trouble with that spot if she could have read this bulletin on "The Removal of Stains from Clothing and Other Textiles." Uncle Sam says that if the housewife knows the cause of a stain, she can find a commonsense way to get rid of it by following the directions given in this bulletin. Methods are outlined for the removal of practically any kind of stain, from "acids" all the way thru the alphabet to "whitewash." They have been tested by the home economics experts of the department.

One of the first requisites in removing stains, says the bulletin, is to know the kind of fabric which is spotted and, if possible, the nature of the stain. Some stain removers which will give admirable results on cotton or linen may, if applied to woolen or silk, remove pieces of the fabric as well as the stain. Likewise, stain removers which are entirely satisfactory for cleaning silk or woolen materials cannot always be used for removing stains from vegetable fibres, such as cotton or linen. Similarly, treatment which will remove some stains immediately will cause those of a different nature to take firmer hold on the fabric.

The second cardinal principle in spot removal is to work while the stain is fresh. Cold or lukewarm water is usually the housewife's best bet for a first step, the bulletin indicates, if the nature of the stain is not known and if the fabric is not injured by water. Hot water should not be used until it is determined that the staining material is such that it will not be "set" by heat.

ALCOHOL ON WINDOWS

When washing windows in winter use a small cloth wet in alcohol. This is excellent to remove any kind of dirt on windows, and can be dried without difficulty, since they will not become frosted as when water is used.

ESSENTIALS FOR HEALTH OF RURAL SCHOOL CHILDREN

By Dr. Thomas S. Wood

More than half (about 12,000,000, or three-fifths) of the school children in the United States are attending rural schools. Country children attending rural schools are, on the average, less healthy and are handicapped by more physical defects than the children of the cities, including all the children of the slums. And this is true, in general, of all parts of the United States.

Table I. is made up from the official statistics of school children gathered from many parts of the country. These statistics lack uniformity; they contain, doubtless, many errors; but there are probably as many errors in the statistics of the city school children as in those of children in the rural schools.

The claim that the health of the people in the country is not so good as the health of those living in cities finds further proof by comparison of the death rate of rural New York and of New York City.

For the last five years the death rate in rural New York has been higher than the death rate in New York City, the largest city in the world. It is apparent that within the last ten or

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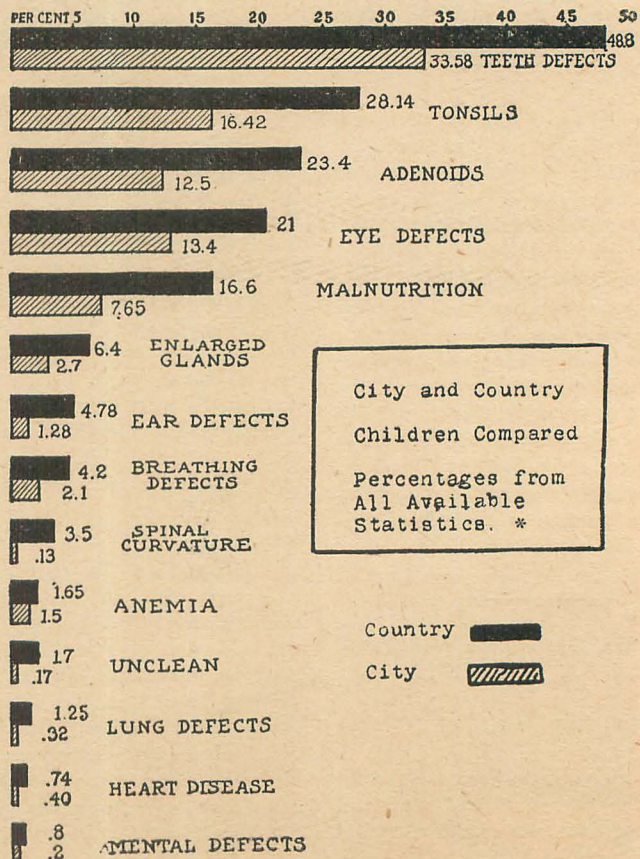
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twenty years the standards of life in cities, in relation to health at least, have risen above those of rural communities.

It is just as true, however, and of the greatest significance, that most of our best human material for leadership in city and country must still come from the farms. For the most part, the raw material to supply the needs of civilization, including the best human supply, must continue to come from the soil. This is in accordance with a great, universal law of life.

If rural America is to continue to be a satisfactory nursery of human life for the nation, it must be made healthful and attractive; it must provide conditions favorable for the cultivation of the best.

The improvement of human health and welfare in rural America is a problem of the greatest significance in relation to our national welfare. It is a problem affecting national safety, national prosperity, national perpetuity. It is a problem dealing with the most essential and most endangered of all of our national resources. No factor is of greater fundamental importance for securing national preparedness either for peace or for possible war.

The most vital phase of this problem of rural health relates to the health and welfare of the children.

Country children deserve at least as much health and happiness as city children.

Country children are entitled to as careful cultivation as crops and live stock.

It is recognized more clearly every day that the public school is the strategic agency to provide for the children of each community not only the best possible methods of general education but also the best available standards for care of health.

In our cities, parents of all grades of prosperity appreciate increasingly the advice and guidance of the schools regarding better care of the children's health. It is evident that the same methods will not apply in reference to the common problems of life and education. The schools of city and country may learn many important lessons from one another. Provisions in schools for health supervision and care of children are still comparatively new both in city and country. About four hundred cities in the United States now have health work of the schools developed to some degree of usefulness and efficiency. The health work in rural schools is still very new, and just enough has been done in a few states and in comparatively few rural schools to demonstrate how important and how practical are these forms of health work.

NORTH DAKOTA SCHOOL LAW

For the first time since 1911 has the State published a volume of the School Laws, and not until 1919 will another edition be printed by the State.

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For what reasons a pupil may be suspended or expelled?
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How schools may be consolidated?
What recourse one has if he is not satisfied with the ratings of the examining board?
Whether free text-books may be adopted without a vote?
What to do when a pupil or parent disturbs the school?
What provision is now made for transportation of pupils?
How pupils may be compelled to attend school?
Whether children may be employed in stores and factories?
How a certificate may be revoked?
What the law is regarding drinking cups, fire escapes, hitching posts, school libraries, pension fund, accredited diplomas, etc.?

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Seasonable Receipts

Mrs. Sadie Baird, Editor

Wheat Conservation Recipes

Yeast Rice Bread

One cup milk, six tablespoons sugar, four tablespoons fat, one and one-half teaspoons salt, one-half cake compressed yeast softened in one-fourth cup liquid, three cups boiled rice, eight cups flour.

This proportion makes two loaves of bread.

Scald the milk with sugar, salt and fat. Let cool until lukewarm, and pour over the boiled rice. Add yeast which has been softened in one-fourth cup warm water. Stir in flour and knead. Let rise until double its bulk. Knead again and put into pans. Let rise until light, and bake fifty minutes to one hour in a moderate oven.

The rice should be boiled in a large

quantity of boiling water, in order to insure a dry rice. At least eight or ten times as much water as rice should be used.

Yeast Rice Muffins

One cup milk, four tablespoons sugar, six tablespoons fat, three-fourths teaspoon salt, one-half cake compressed yeast softened in one-fourth cup liquid, three cups boiled rice, four cups flour.

Scald milk; add fat, sugar, salt, and rice. When luke-warm add yeast softened in one-fourth cup warm water. Add flour and mix thoroly with a spoon. The mixture is too soft to knead. Let rise and when light drop into oiled muffin tins. Let rise and bake about 30 minutes in a moderately hot oven.

Boil rice as directed for yeast rice bread.

Quick Cornmeal Bread (Johnny Cake)

One cup milk, one egg, one tablespoon fat, one-fourth teaspoon salt, three-fourths cup cornmeal, one and one-fourth cup flour, four teaspoons baking powder, two tablespoons sugar.

Method 1. Mix the milk, egg, and melted fat, and add the dry materials which have been well mixed. Bake in a hot oven. The time will depend upon the thickness of the loaf.

Method 2. Scald the cornmeal with the hot milk; add egg and melted fat, and combine with dry ingredients. Bake in hot oven.

Oatmeal Muffins 1

One-half cup milk, one egg, two tablespoons fat, one cup cooked rolled oats, one and one-half cup flour, four teaspoons baking powder, two tablespoons sugar, one-half teaspoon salt.

The rolled oats are cooked in twice their volume of water for an hour or more.

Mix the milk, rolled oats, egg, and melted fat. Add to dry ingredients which have been sifted together.

Rice Muffins

One cup milk, one egg, two tablespoons fat, one and one-half cup boiled rice, two and one-fourth cups flour, five teaspoons baking powder, two tablespoons sugar, one-half teaspoon salt. Mix rice, milk, egg and melted fat. Combine with dry ingredients first sifted together. For method of cooking rice, see Yeast Rice Bread.

Cornmeal Griddle Cakes

One cup milk, one egg, three-fourths cup cornmeal, one cup flour, two teaspoons baking powder, one-half teaspoon salt.

Add beaten egg to milk, and add to dry ingredients which have been well mixed.

Steamed Brown Bread

One cup cornmeal, one cup bread crumbs, one-half teaspoon salt, three-fourths teaspoon soda, one cup sour milk, one-half cup molasses.

Mix cornmeal, crumbs, salt, and soda. Add to sour milk and molasses. Steam three to four hours. Bread may be dried off in the oven for about fifteen minutes.

Oatmeal Cookies (Rocks)

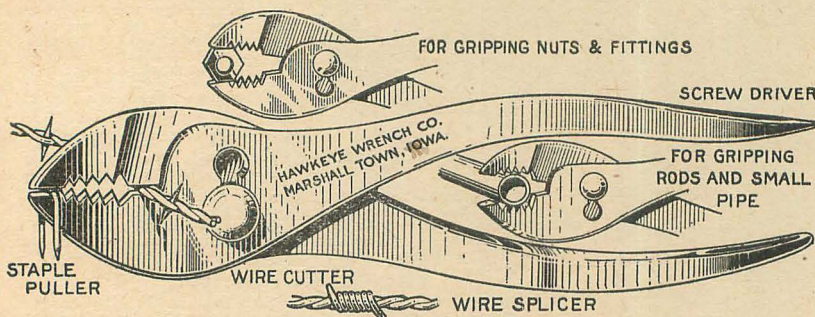
One cup sugar, one-fourth teaspoon salt, one cup fat, two eggs, two-thirds cup sour milk, two cups raw rolled oats, one-half cup cut raisins, two cups flour, one-half teaspoon soda, one-half teaspoon cinnamon, one-half teaspoon cloves.

Mix sugar, salt, melted fat, and eggs. Add sour milk, rolled oats, and raisins. Add flour, soda, salt, and spice sifted together. Drop from a teaspoon on to oiled pans, leaving an

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inch space between cookies. Bake in a hot oven.

Oatmeal Muffins 2

One and one-half cup milk, two eggs, two tablespoons fat, two tablespoons sugar, one teaspoon salt, two cups rolled oats, one cup flour, four teaspoons baking powder.

Pour milk over oats and let soak one-half hour. Add eggs and melted fat. Add to dry ingredients which have been sifted together. Bake 25 to 30 minutes.

To Use Sour Milk

All of the muffins and griddle cakes may be made with sour milk in place of sweet milk. To do this, use one-half teaspoon soda to each cup of sour milk, omitting two teaspoons of the baking powder called for.

To Use All Kinds of Meat Fats

Any fat, especially mutton can be used for shortening in these recipes by observing the following instructions:

To two cups of fat add one cup sweet milk; place in double boiler and cook until thoroughly clarified. Strain thru cloth while hot and place in a cold place. When fat cools and rises to the top, skim off of the milk and use as shortening.

CHRISTMAS CANDIES

This year Christmas candies should be made with as little sugar as possible. Here are a few receipts that are good.

Fruit and Nut Bonbons

Chop equal quantities of figs and walnut meats. Mix and form bonbons to suit fancy. Dip in melted sweet chocolate, and drop on a tin sheet or paraffine paper. Set away to harden the chocolate.

Kisses

Beat until stiff the white of one egg. Add granulated sugar until it holds its form, about one cup. Flavor with rose. Drop mixture the size of a quarter of a dollar on paper, cut to fit the bottom of an inverted pan. Bake in quick oven to a light brown.

Nut and Fruit Confection

Remove stems from one pound figs and stones from one pound dates. Mix with meats of one pound English walnuts. Force all thru meat chopper. Knead on a board, using confectioner's sugar. Roll about one-quarter inch thick. Cut into shape.

H O N E Y

Finest quality, new crop, Clover and Basswood honey, thirty-lb. can, \$4.65; two or more cans, \$4.50 each. Sample 10 cents. Satisfaction Guaranteed. Price List free. M. V. Facey, Preston, Minn.

Peanut Nougat

Cover the bottom of a buttered pan with the shelled peanuts. Put one pound of sugar and one-half pint of water into a pan, and as much cream tartar as can be put on the point of a knife. Stir until sugar is dissolved. Boil until syrup is a light straw color, which takes about half an hour. Pour over nuts and set away to harden. Use walnut meats for a change.

DATE COOKIES

One cup butter, one and one-fourth cups brown sugar, two eggs, two and one-half cups flour (more if necessary), one pound dates cut fine, one-fourth pound walnuts cut fine, one teaspoonful of cinnamon, one-half teaspoonful allspice, one teaspoonful soda dissolved in tablespoonful warm water. Add soda the last of all.

POTATO OMELET

One large cupful of mashed potatoes, one heaping teaspoonful of flour, one level teaspoonful of salt, three eggs, having the yolks and whites beaten separately, one-half cupful of milk and a little finely-minced parsley. Pour in a hot buttered pan, brown slightly and serve hot.

MINCE MEAT

Three cupfuls of chopped boiled beef (it should be cooked almost to pieces), six cupfuls of sour apples finely chopped, one cupful of chopped suet, two cupfuls each of seeded raisins and cleaned currants, one cupful each of vinegar and cider or fruit juice, one tablespoonful each of cloves and cinnamon, half a nutmeg, grated, and one-half tablespoonful of salt. Bake in two crusts of rich paste.

Baked Apples

Pare and core apples; fill space with honey. Bake slowly—little water in pan.

Baked Cranberries

One pint sugar to one quart berries. Put in dish without water. Cover tight and bake slowly.

Crumb Cake

(New England Receipt)

One cup sugar, one-half cup shortening; one egg; one teaspoonful cinnamon; two cups flour; one heaping teaspoon baking powder; one heaping cup fine bread crumbs; one-half pound dried currants or raisins. Mix with milk or milk and water to a soft dough. Bake slowly.

STEAMED TURKEY

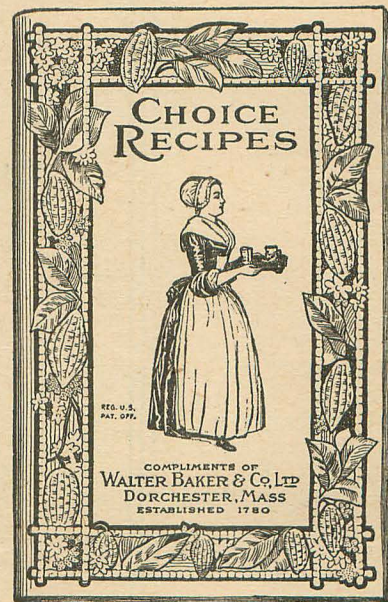
When crowded for room in the oven, prepare the turkey the same as

for roasting. Place it in the oven until it is a delicate brown, then steam it on top of the stove. If no steamer large enough to hold it is available, one can be improvised from a large tin pail or lard-can. Put into the bottom of the pail about one quart or three pints of water, and rest the turkey on something which will raise it above the water-level. Cover, and steam for two hours, or more if necessary, keeping about one quart of water in the steamer all the time.

Giblet Gravy: A good way to make it is to cook separately the giblets and the neck in about one quart of water. When they are tender, chop up the giblets and add with the water in which they have been cooked to the water in the roaster.

If the high price of turkey at the Christmas season is prohibitive, or if the family is small, a good fat hen will make an excellent substitute. It should be prepared with the same care as the turkey, and will have a delicate flavor if cooked after the same directions.

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